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THOUGHTS

ON

THE FUTURE OF THE HUMAN RACE.

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By WILLIAM ELLIS.

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PREFACE.

In former days it was almost taken for granted by the learned and cultivated—the smaller portion of mankind—that the larger portion must ever remain unlearned and uncultivated, and consequently uninformed on many subjects for the understanding of which long study and preparation were supposed to be necessary.

With the progress of time, and particularly of later years, it has been found not only that the range of knowledge possessed by the learned and cultivated has been greatly extended, but that much of this increased knowledge, when once mastered by a few, may be imparted to all with rare exceptions, even to

those who will still remain among the unlearned. Indeed, it would be difficult, if the attempt were to be made, to keep the most unlearned among us unacquainted with much of the knowledge of the present day, to which the brightest ornaments of the past were strangers.

I shall not trouble the reader with illustrations of the truth of this remark. He must be a strange being, and have been peculiarly placed all through life, who can have doubts upon the subject.

My excuse for attempting to give circulation to the thoughts set forth in the following pages is my belief that the matters discussed, as well incidentally as directly, are of immense importance, not only to the happiness of society, but of every one of its members; that they are not so generally attended to as they might be; and that nobody ought to be shut out from the opportunity of exercising his own thoughts upon them.

I need hardly say that I do not look for readers among the learned. They would recognize nothing

as true or clearly expounded in what I have written with which they are not already familiar. They would possibly detect errors into which I have unconsciously fallen, and be alive to numerous defects in my attempts at exposition. Nevertheless, it is far from my wish to shun criticism, and I would gladly profit by any corrections and improvements that may be suggested to me.

My appeal is to the unlearned, and it is but fair to apprise them, that they are addressed by one of themselves. I claim for them and myself the capacity to form a judgment upon all the matters treated of, and the wish to form an honest judgment, and a readiness to reconsider any conclusions where it can be shown that data have been overlooked, or where new data are produced, and to correct or modify conclusions as reason may require.

The number of the unlearned will always be large in proportion to that of the learned. It is of some interest, therefore, to ascertain what disqualifications in regard to the capacity of acquiring

and applying knowledge will inevitably attach to them. These disqualifications may not be so overwhelming as might at first be feared.

No sensible man could harbour a thought or utter a word in disparagement of learning. But it behoves us to be on our guard not to overrate the knowledge and judgment to be looked for in men who take rank among the learned. Not to notice the prejudices and superstitions of many of the learned of former days, we may still hear a learned bishop attributing epidemics among men and cattle to the "just wrath" of a God of infinite goodness and wisdom. A learned statesman, capable of giving us our best translation of Homer, can be alarmed, or act as if he were alarmed, at the frightful consequences likely to ensue from permitting people to procure food from foreign countries. A learned judge will expect, or act as if he did expect, truth from a knave in the witness-box, who expresses a belief in posthumous rewards and punishments, while he will not receive the evidence of a witness who has the courage to

avow his disbelief. And a learned schoolmaster will send forth learned scholars into the world, uninformed of many of the difficulties of life, and therefore unprepared to grapple with them, and almost unconscious of the extent to which their well-being depends upon their own conduct, or of what that conduct ought to be.

As regards the unlearned, it appears to me that intelligence has at last been sufficiently diffused among them to justify our expecting that at no very distant period, all, with rare exceptions, will be able to form rational anticipations of the future, and each will know how to direct his own conduct so as to assist in bringing about a state of general well-being, and to enjoy a fair share of it himself. The learned will at the same time be able to add this useful knowledge to their other attainments, and thus improve their capacity of imparting instruction to others.

There is another aspect of this question of the capacity of acquiring and applying knowledge which

ought not to remain unnoticed. The quantity and variety of the knowledge which has been accumulated, are such that no single individual, however gifted, could possibly master the whole. Nevertheless, none of it could be lost, without detriment to society. The possession of one portion of this knowledge is indispensable for every human being. But the other—the larger and more abstruse portion—may safely be left unacquired by the greater number of individuals, provided it be adequately acquired by a smaller number. And the knowledge to which I am inviting the attention of the unlearned must, if I am not mistaken, be included in the former.

It will be observed that I have scrupulously avoided seeking support for my own views and expositions by leaning upon any other authority than that of my own and my reader's common-sense—our experience—what we have observed and reflected upon. We know that we are surrounded by aids to observation and reflection which were

not enjoyed by our predecessors, although prepared and bequeathed to us by them. They have not only left us their work and their knowledge, but records of the steps by which the first were produced and the second acquired. We must renew their works or substitute better in their place as fast as they are worn out, not by appealing to their authority, but by using their processes and improving upon them. Nor can we master their knowledge by accepting it on trust. We must understand the trains of reasoning preserved to us, and if possible expand and supplement them. Children need to be assisted by adults, or rather the uninformed by the well-informed. But no other authority than that of our own observation and reflection is needful to convince us that the three angles of a triangle are equal to two right angles; that $(a+b)^2$ is equal to $a^2+2ab+b^2$; that a column of water of thirty feet, and a column of quicksilver of thirty inches, and the atmosphere above and around us, in its average state, will about balance one another; that the earth, so far as it has been

examined, in its solid, its liquid, and its gaseous forms, is reducible to about sixty elementary substances, the various combinations and juxtapositions of which develop heat and electricity and other phenomena, the dexterous application of which has armed us with the powers in daily use among us—the latest being that of intercommunication, over land and under the sea, at great distances in a space of time so short as to be most conveniently measured, not in days and weeks, but in minutes and hours; that the earth, in its entirety, is a spherical body floating in space, rotating on its axis, and travelling, in common with other planets, round the sun, towards which it is so inclined as to give us the succession of our seasons in addition to the succession of day and night; that whatever else may be at hand to enable men to exist, their own labour must contribute besides, and that to make a comfortable existence or a state of well-being possible, this labour must be vigorously applied, and skilfully and intelligently directed; and that finally, for mankind to exist in

the highest state of comfort, certain qualities, such as Intelligence, Industry, Economy, Trustworthiness, Humanity, Truthfulness, Sobriety, and Respect for law and order, must be, as nearly as possible, universally prevalent.

As regards thoughts of the future, a man with very little learning can comprehend as well as one with much learning, that his hopes and fears occupy a considerable part of his existence, and give a colouring to the remainder. He can also comprehend that hopes and fears may be unreasonable as well as reasonable; that unreasonable hopes are likely to be followed by disappointment, and certainly call forth useless labour and sacrifice; and that unreasonable fears embitter unavoidable suffering, and add to it, besides occupying the place of reasonable fears which would first fix attention upon avoidable suffering, and then call forth efforts to guard against it.

For the acquisition of knowledge upon the most important of the subjects bearing upon human well-

being, where the observing and reflecting faculties are more called into exercise than the memory, and where difficult arithmetical or algebraical calculations are not involved, the learned man has really very few advantages over his less learned fellow-student. The soundness of the conclusions at which either will arrive in the same school, especially if that school be the world as we now behold it, depends much more upon the freedom from superstition and prejudice, than upon the quantity of (so-called) learning with which he enters it. On these grounds I justify my attempt to gain the attention, awaken the curiosity, direct the studies, and encourage the hopefulness of those who might be deterred from inquiring into the matters of which I have treated, under the impression that such matters are beyond their comprehension.

THOUGHTS

ON THE

FUTURE OF THE HUMAN RACE.

CHAPTER I.

THE FUTURE NOT ENTIRELY HIDDEN.

In taking up the pen with the double purpose of introducing order into his own thoughts, and of making them intelligible to others, upon a subject so full of difficulties as the future of the human race, an inquirer is met at the outset with many questions which must be solved before the main subject can be approached with any chance of success.

How often are we not told that we know nothing for certain concerning the future! Is this the case? Or are there some things that we can and do know,

and others that we do not and cannot know? Is there anybody, not bereft of reason, who does not think occasionally of the future? If we do not know, we seem to know that we should soon cease to live if we did not think of and provide for the future —if we did not act as if we did know.

When we consult an almanac, ready provided for any future year, we feel that we learn from its pages, and therefore know, when it will be high or low water, when eclipses and transits will occur, and the times of sunrise and sunset, and of new and full moon. Most of us would be conscious that we are incapable of making the calculations which lead to these predictions. We simply confide in those who have been trusted to make them; and so confiding, do we not feel that they know the events of the future, which they are announcing as certain to others?

Turning from an almanac to the time-tables for the approaching month of the various railways; when we note the hours at which the trains are appointed to start on any particular line, the only doubt we feel concerning our knowledge of the

actual times at which the trains will start, arises from our knowledge that accidents may occur to prevent the carrying out of the arrangements on which the starting of a train depends, or that some change of purpose in the responsible person by whom the times were appointed, may induce him to alter them.

Few people would hesitate to say—we know that we shall die, but we don't know when; or, we know which will be the longest day in the year, but do not know what the weather will be on that day. Illustrations such as these might be multiplied to any extent we please. The upshot of them all would be to show that we speak of the future much as we speak of the present and the past, taking it for granted that we know some things, while we are ignorant of some things, and in doubt about others.

The columns of the very newspaper now upon our table supply an admirable illustration of the unsettled state of thought in regard to the future. On one page, is a long narrative under the head of "The Atlantic Telegraph Expedition;" on another, a leading article, the first words of which are, "That there is

nothing new under the sun, but that what has been is what will be, is in nothing more remarkably illustrated than in the ever-recurring laments of satirists, moralists, poets, and divines over the dangers and corruptions which attend a rapid growth of wealth." *

We meet, over and over again, with references to the tendency of the sea to encroach upon and to recede from different parts of the land, and of the land gradually to rise in some parts and subside in others. And what we call our knowledge of the future is often described as a growth or tendency of the past and present. We say that it is the tendency of legislation to lead to certain results—of security of property to promote industry and economy, and the accumulation of wealth—of judicious education to promote intelligence and good habits—of contrivances for cleanliness and ventilation to promote good health—of facilities for interchange to extend division of labour and to increase the productiveness of industry—of example, good or bad, to confirm or weaken the good influences of education. When expressions of this kind are used, it is plain that

* *Times* newspaper, Saturday, 22nd July, 1865.

while the particular form to be assumed by the future is looked upon as beyond our knowledge, no want of faith is implied in what some of its characteristics will be as growing out of the present. Differences of opinion and changes of opinion are on record concerning the future to be anticipated from the past and present, but it would grate against the mental habits of most people, to insist that the future did not depend in some measure upon the past and present.

It still remains to be stated or, perhaps, to be ascertained, how we obtain our knowledge of the future. Before we make that attempt, or enter upon the inquiry, some consideration of the means by which we obtain what we call our knowledge of the present and past may be of use to us.

If we begin by confining our attention to the present, separating it, as far as we can, from all connection in our thoughts with the past and future, it might surprise some of us to learn that we never talk of our knowledge of the present thus disconnected. We do not say—we know that we are hungry or thirsty, sleepy or wakeful, hot or cold,

well or ill, but—we feel so. In like manner we say —we see light and shade, we hear sounds, we smell and taste, sometimes with pleasure, sometimes with pain. We only begin to speak of our knowledge when we associate our present sensations with something past. Any of our present sensations may suggest to us, or lead us to say—we know that we were hungry or thirsty, sleepy or wakeful, hot or cold, well or ill at some former period; or—we know the scenery which produces that combination of light and shade, we know the voice of a friend, the cry of a child, the song of the nightingale, the smell of a rose, the taste of an apple. The past is more or less interwoven with the present whenever we make use of the words "we know." Memory, or a consciousness of the past, is an essential element in what we call "knowledge."

Sensation and memory together bring us acquainted with sequences. They tell us that some things, as far as we have observed, have been invariably preceded by other particular things, and that some things have been invariably followed by other particular things. These observed sequences

are mixed up with things between which no order of occurrence has been observed. The additions which men have made to their knowledge of sequences, day by day, and through a succession of ages, are notorious. And it need scarcely be mentioned that these additions could not have been made, if memory had not been assisted by the power of recording, which we obtain from language spoken and written, and if observation had not also been assisted by the opportunities of intercommunication afforded by the same gift or acquisition.

There must be some other faculty besides those of sensation and memory inherent, or susceptible of development, in our organization, which enables us to transfer the knowledge acquired through them to the future. Till we can find a more appropriate term we will call that faculty, anticipation. We anticipate that in the future some things will follow from the present, and also will follow one another as in the past; that when some things which have occurred in the past shall recur in the future, they will be followed by things similar to those by which they were followed in the past; and that many things

will occur which we are unable to anticipate, or to anticipate by what they will be followed when they do occur. In other words, we anticipate that the future will be in many respects similar to the past—numerous streams or successions of events. Whatever doubts we may feel in other respects, we anticipate that there will not cease to be a future—that streams or successions of events from the past have not come to an end in the present, but will flow on to the future. Our very existence teaches us thus much. If anybody in the past had expressed the opinion that there would be no future, we who have come after him are living to show how thoroughly mistaken he was. Judging by our experience of the past, if anybody were to undertake to describe to us beforehand the events of to-morrow, we might mistrust the accuracy of the whole, or any part of his description; but if he were to tell us that to-morrow would not come, we could not help mistrusting him altogether. Whatever doubts may perplex us as to what the future is to be, we cannot, if we would, get rid of the anticipation that there is to be a future.

The order of occurrence in many of the past successions has been ascertained; and it is anticipated that the same order will be continued. The order of occurrence in others has not been ascertained; but it has been observed and recorded that fewer orders of succession were known formerly than are known at the present time, and it is anticipated that further progress will be made in discovering orders of succession.

This faculty of anticipation which has been cultivated and developed so largely in man, is to be found only in its rudimentary form, where it is to be found at all, in other animals. In them we call it instinct. Limited as this instinct in them may be, compared with the faculty of anticipation in man, cultivated and developed as we see it, they place, as far as we can judge, implicit reliance upon it. When dogs follow the scent, bees feed their grubs, and hens sit upon their eggs, they seem to know what will follow—at all events, what will not follow if they relax their efforts. The surprise and distress exhibited by a hen which has been set upon duck's eggs, when she sees the ducklings take to the water, may be accepted as some proof of the confidence with

which she looked forward to what would be the conduct of chickens.

The only objection that can be raised, as it appears to us, to the admission that our knowledge embraces the future as well as the past, must be to the use of the term "knowledge." When we refer to and speak of things that have happened in the past and that will happen in the future, we equally say "we know." It may be contended that the knowledge obtained by the help of our faculty of anticipation is less certain than that obtained through our senses and memory. But is it less certain? Has not the cook more confidence in his knowledge of what will happen to the joint which he is about to put upon the spit than the grazier has in his knowledge of the means by which he attained to his present breed of cattle and quality of meat? and has not the astronomer more confidence in his knowledge of the time when the next eclipse of the moon will occur, and how it will be caused, than the geologist has in his knowledge of the time when, and the means by which, the formation of our coal-fields was brought about? Is it not undeniable, besides,

that we have been led into many of our mistaken anticipations through the mistakes of which our senses and memory have been convicted?

Before we can answer these questions satisfactorily, we must take some account of another faculty, without which our senses and memory would not have supplied us with the knowledge of the past and present which we are conscious of possessing. Our knowledge of magnitude, shape, distance, and motion, is obtained by inference from the impressions made upon us through our senses, and preserved to us by memory. The sun and stars are not larger, nor more distant, nor more motionless, than they were a thousand years ago, but the inferences drawn from their apparent magnitudes and changes of position have undergone a great change. The earth is no more felt to move than it was a thousand years ago, but we do not infer, as our forefathers did, that it is motionless. The scene-painter and ventriloquist can deceive us, the one by so representing light and shade on a flat surface as to make us infer that we are looking at distant objects; and the other by so regulating his voice as to make us infer that the

sounds come from another quarter. From thunder-storms we infer electric agency, and from local epidemics we infer ignorance or disregard of sanitary conditions. From neither do we infer the intervention of an angry or revengeful Deity.

To these illustrations of false inferences in the past might be added others of false inferences still generally prevalent, although repudiated or corrected by a few. Probably there are many false inferences still unperceived by us all. If these false inferences are transferred by our power of anticipation to the future, the error or uncertainty in our assumed knowledge would be attributable, rather to our inferring, than to our anticipating faculty.

Much of our knowledge, both of the past and present, and of the future, rests upon evidence, that is, upon the testimony of others; that is, upon the reports which they make of the inferences drawn by them from their sensations, memory, and anticipations. The sagacity, the readiness, and the caution with which we infer from the matter submitted to us through our sensations, our memory, our antici pations, and the testimony of others, the industry

and skill with which we seek for more, and continue to keep clear of the illusions which these faculties separately and collectively might fasten upon us, determine the character of our so-called "reasoning faculties." Again, the character of our reasoning faculties, their competency to guide us, and our habitual submission to their guidance, constitute that to which we give, and ought exclusively to give, the name of "judgment;" the title to which, however, can only be acquired through conduct.

Nobody, we presume, would like to assert that men had as yet arrived at the limits of their knowledge, and that it is as complete, and hence as certain in all respects, as it might be or is to be. It would be more reasonable to suspect that we have much to learn; and much to correct, in what we have accepted as knowledge. Whether our deficiencies, both as to quantity and correctness, be more conspicuous in our knowledge of the past and present or of the future, it would, perhaps, be premature to decide. We may find that our reasoning faculties could hardly go astray in one without going astray in both. And it is obvious that our knowledge of the past and

present would interest us but little if we could not bring it to bear upon the future; call it by what name we will, when we have brought it to bear.

Our inquiry will be greatly facilitated if we can keep clear of misapprehension as to the meaning of the terms constantly to be brought before us, and which we cannot avoid using. "Cause" and "effect" are two such terms. When people engaged in any work—which, by-the-by, means engaged in bringing about some future result—are asked why they do it in that particular way, their answer will begin with the word "because," to which may be added, "whenever we have acted in this way formerly, we have produced the result which we are now seeking." The mode of doing the work is called the "cause," or presumed cause, and the result sought for, the "effect," or expected effect.

Whether the individual questioned were an engineer planning a long line of railway or constructing a steam-mill, a builder erecting a warehouse, a captain navigating his vessel, a smith making or repairing a lock, or a mason fashioning or fixing a stone; whether the work on hand were

extensive and requiring much time for its completion, or trifling and completed almost as soon as begun, there would be one form of answer, the first word in which would be "because." In many cases, no doubt would be felt or expressed as to the result in the future. In some cases, there would be doubt; and it will be useful to note why.

The physician, who recommends sanitary precautions and prescribes medicine for the ailing, would scarcely say more than that, in his experience and as far as he has been able to learn from others, favourable results have more frequently followed from such precautions and prescriptions than from any others which he has known to have been tried. Statesmen and legislators, in conducting the affairs of a nation, making, repealing and amending laws, speak much in the same way. A confident tone in prognosticating of the future would rather destroy than strengthen confidence in their judgment.

It appears to us that they who have inquired most successfully, and expressed themselves most accurately, have applied the terms "cause" and "effect," exclusively to those antecedents and con-

sequents which they have found to be inseparable in the past, and which they anticipate will continue to be inseparable in the future. This is the sense in which we shall use those terms. In cases where the connection of cause and effect has not yet been fully inquired into, or where some uncertainty is still felt as to whether the particular antecedents and consequents are really the causes and effects which they are supposed, or expected to be, some qualifying word indicating the want of certainty is prefixed to the words "cause" and "effect," if these words are used at all.

Some examination of the process by which it is commonly attempted to arrive at a knowledge of the causes not yet learned, of effects which we either wish to have repeated or prevented in the future, may help to prepare us for conducting our inquiry so as to lead it to a satisfactory issue.

Let the effect to be investigated be the loss of a ship, an unusual death, the fall of a house, an explosion in a mine, the bursting of a reservoir, or the excessive mortality in a district: they who undertake the investigation may succeed in tracing

these effects to their respective causes—the carelessness or ignorance of the captain, the action of poison, neglect of regulations for safety, faulty construction, bad drainage, and over-crowding,—or they may be foiled in their attempt.

It is notorious that effects similar to these have been investigated in former times, and traced to antecedents supposed to be their causes, but which have since been shewn not to be their causes. And with these warnings before our eyes, we can scarcely be free from all fear lest even now we should be sometimes mistaken in assigning effects to causes, or in tracing back from effects to their causes; and that too after having abandoned as hopeless the attempt to establish, in the present state of our knowledge, a connection of cause and effect, between many of the antecedents and consequents with which we are familiar.

Every student of history must be cognizant of the various and contradictory causes to which, at different times, effects perfectly similar have been attributed. Success in battle, which is now generally expected from superior strategy, armament, courage, and discipline, has been looked for in the entrails of

beasts, in the flight of birds, and in the appetites of sacred chickens. The progress of this country in wealth and well-being has been attributed to its insular position, to its coals, to its iron, to the prohibitory laws which *protected* its commerce, as well as to the industry, intelligence, and courage of its inhabitants, to the vigour with which they prosecuted their industrial undertakings, under all the disadvantages of the restrictions imposed upon them, and to the perseverance by which they at last obtained release from those restrictions.

Seeing, then, the numerous misinterpretations of cause and effect in the past, of which we have become cognizant through our increased knowledge and through our greater caution and sagacity in admitting the connection of cause and effect between antecedents and consequents, seeing also our incapacity, of which we are conscious, to trace back many effects of deep interest to us to the causes which gave rise to them, we are compelled to suspect that much of our difficulty in prognosticating future events may be caused by our ignorance and misinterpretation of the past and present.

When sensation and memory, aided by our aptitude at inferring readily and correctly from what they have impressed upon us, shall have enabled us to trace effects to their causes in the past, and to correct the errors into which we have been led by former ignorance and presumption, we may find that much of the uncertainty commonly supposed to attach to the exercise of our anticipative faculty will disappear. At all events, we seem to be more exposed to error and uncertainty in prognosticating of the future from our inability to establish the connection of cause and effect in the past, and from the unconsciousness of this inability which leads to presumption, than from the confidence with which we assume that similar causes will continue to be followed by similar effects.

It is just possible to conceive of man, in a savage state, as ignorant or as having no thoughts concerning the future. We cannot but be sensible, however, that at this age of the earth, and in this portion of it, we have outgrown that state. We could not divest ourselves of what we call knowledge of the future, even if we would. We cannot avoid acting

upon our knowledge of the future. If we did not act upon it, or if we had it not to act upon, we should, according to the extent of our negligence or ignorance, suffer or even perish.

Men are not only deeply impressed with a sense of the benefits derived from what we call knowledge of the future; they are persuaded that it is possible for them to acquire more knowledge, and to make a better use of the knowledge which they have. It is far from their thoughts to act as if the future were entirely unknown or uncertain. By their conduct they tacitly admit that much is known and much unknown, some certain, and some uncertain. About the unknown they are striving to learn, and against suffering from the uncertain they are striving to protect themselves. They are also striving to detect the signs by which they may distinguish, among all prognostications of the future, those which may be relied upon. Experience has so often made known to them the losses which they have sustained through disregard of past prognostications destined to be verified, and by reliance upon past prognostications, not only destined to be un-

verified, but incapable of verification, that they are anxious to escape similar consequences of incredulity and credulity.

The practice of insurance may be taken as a remarkable development of the improved method in our times of dealing with the future. Never was more care taken, nor so much knowledge applied to guard against casualties from fire, storms, and disease. The result of this increased care and knowledge has been a diminution in the comparative amount of loss and suffering. But casualties have not ceased, nor can the particular vessels, warehouses, and individuals upon which a casualty is to fall, be pointed out beforehand. The thoughtful merchant might be told which vessel in a hundred is to be lost, or which warehouse in a thousand is to be burnt; but he would turn a deaf ear to those who could pretend to such extensive and unfathomable knowledge, and proceed to act upon his own more limited and accurate knowledge of the future. This tells him that—say, one ship in a hundred will be lost, and one warehouse in a thousand will be burnt every year, on an average of years; but it does not tell him which

is to be the one. Insurance, which spreads the loss when it does occur, over numbers who are capable of bearing it, instead of leaving it to crush him upon whom it might fall, is man's contrivance for acting upon his knowledge, both of what he does and of what he does not know.

Loose assertions concerning the impenetrability or uncertainty of the future are as unwarranted as presumptuous prophecies, sure to be disproved as soon as the future becomes present in the course of time, or couched in such vague and obscure language as either to be no prophecy at all, or capable of being twisted into a meaning adapted to whatever event may occur.

If, through our meditations upon the future, we can learn to discriminate between what we do and what we do not know, and to separate from the first all that has unadvisedly been accepted as knowledge, we shall be able to turn the knowledge which we have to better account, and be greatly assisted in our efforts to obtain more.

We must bear in mind that, while we cannot record or communicate our thoughts without the use

of language, we may also, through its use, be prevented from observing how mistaken, obscure, and contradictory our thoughts are. To guard against this danger, there is one precaution accessible to us —we may make our observations and draw our inferences independently of words, and afterwards adapt our words so as to give expression to what we have observed and inferred.

When we hear people talk of the uncertainty of the future, or of man's ignorance of the future, we know that if these same people acted as though no reliance could be placed upon the future, it would be necessary for the good of society that they should be relieved of the responsibility of self-guidance. The result of man's experience thus far is, that some events will occur, some may occur, and some will occur according as he conducts himself; and that, of these latter, his increased knowledge and capacity have enabled him to obtain a greater mastery over many more than formerly. For his own state of mind in regard to this experience he wants an expression—a name—a word. One word would have served as well as another. It so happens that the

word in common use among us is "knowledge." And of future events, we say that some of them will certainly occur, some probably and some conditionally, and these adverbs are meant to express the degrees and kind of confidence with which the future is relied upon.

Experience which makes it impossible for man, even at a very early age, "not to feel convinced," or, in other words, "not to know," that some things will happen, also forces him to confess that there are other things concerning which he is in the dark, and that he is in doubt as to the nature and order of many other future occurrences. Looking back to the early years when a man's experience can have done but little for him, must not some such suggestion as this have presented itself either to him or, in his behalf, to the more gifted individuals to whom was intrusted the guidance of his understanding?

"In whatever other ways your thoughts may be engaged, let some of them be directed to the extension of your knowledge of the future, to the learning how to distinguish the knowable from the unknowable, the possible from the impossible, and the

probable from the improbable; and also to detect the unwarranted prognostications which credulous or dishonest people will attempt to impose upon you."

It will have occurred to most people that in forming a judgment upon prevailing thoughts, whether of the future or of anything else, we should be led astray, did we rely upon words alone, irrespectively of conduct, as their exponents. However deeply we may be impressed with the wildness, inconsistency, and thoughtlessness to be seen in conduct, there is one thing which we do not see—denial of a future. They who might deny a future in words never deny it in conduct. The utmost that conduct ever leaves us in doubt about is, what the future is expected to be.

Experience, that is, observation, experiment, and reflection in combination, has convinced mankind that there is to be a future. Experience has also taught most of us that, of things future prognosticated in the past, some have occurred while others have not; and that things besides have occurred, some of which were pronounced to be impossible, and others were never thought of.

These teachings of experience have been accompanied by numerous changes in the direction of human effort for the purpose of producing new kinds of future previously deemed unattainable, or of producing the same kinds of future which previous efforts were found to be less efficacious in producing than in preventing.

The whole field of industrial effort teems with examples of such changes. Equally remarkable are the changes which are to be seen in the fields of legislation, morals, and education. And in citing a few of the more remarkable of these, we ought in fairness to add that the workers in those fields of old had the same general future in view as the workers who have followed them and are working there in these days, viz. the benefit of society. Laws had been enacted and maintained, till forty years ago, granting monopolies, imposing prohibitions and hindrances, fixing prices, wages, and rates of interest, restricting partnerships and combinations, and preventing less costly methods of production, and encouraging the more costly. If laws such as these have not entirely disappeared from the statute book,

the few and less noxious which linger there have received notice to quit, being condemned by public opinion.

The object of our criminal laws is the same as of old—the protection of society. But the character of the laws has undergone a mighty change. Torture and mutilations have been abandoned, and death is seldom inflicted. Thoughts of retaliation have made way for those of contriving the best means of preventing crime and reclaiming criminals.

This new direction of thought has coincided with the wiser thoughts that have risen and spread among us in connection with education. The difficulty of substituting knowledge for prejudice, good for bad habits, and kindliness for malevolence in the criminally disposed, has helped to confirm wiser and better dispositions in regard to children, and to promote efforts for cultivating the qualities desirable in them from the beginning.

Another result of experience is, that uncertain as our command appears to be over the future of individual children, in regard to their intelligence, dispositions, health, and longevity, the results attainable

in all these respects upon the majority of them collectively may be predicted with confidence.

Thus experience enables us to accomplish much that is desirable in the future, while it points out the limits within which success in attempts to influence the future may reasonably be hoped for.

Be it again observed, inquiries concerning the future, in common with all other inquiries, cannot be conducted without the intervention of language. We need to communicate and to record, and language is our only resource for these purposes. We readily concede to those who object to the use of such terms as "to know, to foretell, to prognosticate, to prophesy," in describing conclusions which have been formed concerning the future, that language ought only to be used to make clear and precise, and not to obscure and confuse both what we do not, as well as what we do understand. We must not forget, however, that our first steps in knowledge, or in consciousness of impressions received, precede language. As infants, before we can talk, we become conscious of pleasure and pain, of a past, a present, and a future, by virtue of our organization; and, as

we advance in years, we become conscious of false as well as of true inferences which take their origin from the impressions received in conformity with our organization. Of some things future we feel confident, of others doubtful, and of others we calculate the probabilities. We cannot do without words to express these states of consciousness, and to assist us in the investigation of their reasonableness. Words, not of our own choice or manufacture, are ready provided. When warned not to use them, surely we are entitled, since some words are indispensable, to insist, before discarding those in use, to be provided with others to which no objection will be taken, and which can be made generally acceptable.

At present we are not provided with substitutes for the words objected to. We hold fast, therefore, by the only means of communication open to us. We could not, even if we would, get rid of our own expectations of a future. We have proofs in abundance to convince us that similar expectations are shared by others, from the cry of joy made by the infant at its mother's approach, to the turning of

the first sod for a railway meant to extend a thousand miles, or to the drawing out of the first yard of the copper wire intended to stretch from Europe to America. We are also conscious of the doubts and changes of opinion which we have experienced concerning the kind of future to be expected, and concerning the best means of bringing about one future rather than another. And we are satisfied that other people have experienced similar states of consciousness. We are conscious, besides, that we need to be acquainted, as far as possible, with the inevitable future, the probable future, the procurable future, and the avoidable future, in order to regulate our conduct conformably. We cannot suffer ourselves to be turned aside from the studies through which we may hope to become informed upon these points by mere verbal difficulties. If we are ill-provided with language, we must recognize that, among the many difficulties with which we have to grapple, we must not be unprepared for verbal difficulties. To be prepared for these, however, is already to have all but overcome them, with little to regret except that some time which can

ill be spared from the investigation of things, has to be consumed in guarding against ambiguities in the terms by which they are supposed to be designated.

CHAPTER II.

AIDS TO PROGNOSTICATION.

THE daily work of life, in which we take our share, suffices to assure us that all men, with rare exceptions, have some thoughts of a future. We feel that we could not, even if we would, divest ourselves of such thoughts. We should scarcely be warranted in affirming that other animals are entirely devoid of cares for the future, ready as we are to attribute all their doings to instinct and habit. If there be, or if there have been, men uninfluenced by thoughts for some future, they must be of a kind of which the lowest savages known to us are rather approximations than specimens.

There are parts of the earth in which we might imagine it to be possible for our species to have lived for a time, stretching out their hands to gather the

wild products of the ground when hungry, or seeking shelter and covering when wet and chilled, or climbing trees to escape from beasts of prey. Only for a time, however, can we imagine them to have lived without looking out for the places where food and shelter and security were most likely to be met with; and then we have a beginning of thoughts of a future.

The monuments which have been handed down to us from our forefathers, show that they had thoughts, not only of a future, but of a distant future. The records, also, which have been preserved to us, of their thoughts, show that those thoughts extended to their own posthumous existence, as well as to the existence on this earth of children and children's children.

Pondering over the impressions left within ourselves by the sensations, resolutions, and doings of our past lives in combination with the doings and intentions of the present, we are conscious of what we call a knowledge of past, present, and future. But when we begin to break up this knowledge of ours into its several parts, we further become conscious that there are marked distinctions to be attended to, not

only in regard to the different kinds of knowledge, but to the faculties in ourselves by which we know or become conscious of matters past, present, and future.

Knowledge of any kind presupposes sensations or feelings, including among them the impressions left behind by previous sensations or feelings. Without memory we could have no knowledge of the past, and we should scarcely be able to speak of knowledge of the present. Some other faculty must, however, be at hand to help us to a knowledge of the future. The faculty of anticipating or expecting seems as indispensable to bring us acquainted with the future, as that of remembering to keep us acquainted with the past.

If we could say that knowledge of the present rests upon sensation, we must add memory to sensation to obtain knowledge of the past, and anticipation to both to obtain knowledge of the future. When we say that we are hungry, we mean we feel hungry. When we say we know that we were hungry yesterday, we mean that we remember to have felt hungry yesterday. When we say we know that we shall be hungry to-morrow, we mean that we expect to feel hungry to-morrow.

The past and the present are made up of facts, events, phenomena, unalterable, irrevocable, certain. How is it with the future? Do we ever speak of the future as unalterable, inevitable, certain? We are quite aware that we often speak of the future with doubt and hesitation, and speak of many future events as uncertain or impossible—as probable or improbable. We must bear in mind, however, that the actual past and present, and the past and present as understood by man, are not identical. We are conscious that our conceptions of the past vary greatly from the conceptions of our forefathers, which have been left on record by them; and we are conscious, besides, of the changes which have taken place in our own conceptions of past phenomena, and of the causes of present phenomena.

A comparison of man's conceptions of the future with his conceptions of the past would by no means warrant the conclusion that he has been or is more at fault in one than in the other.

The sun is due south at noon to-day, it was so yesterday, and it will be so to-morrow. The eclipses, transits, and occultations of sun, moon,

planets and stars of the past are on record, and the times of similar phenomena in the future are confidently predicted, and implicitly relied upon.

This confidence of anticipation is clearly based upon an ascertained succession of events in the past, and it is assumed that a similar succession of events will continue in the future. Such successions have been observed, have been foretold, and, the correctness of the anticipations having been verified, reliance is placed on similar anticipations for the future.

But all successions of events in the past are not expected to be repeated in the future. History, we are told, does not repeat itself. Judgment and discrimination are evidently required to enable us to select from among past successions of events those which are repetitions of former successions, and also to predict which will be repeated, and which will not.

Some preliminary caution may be required to prevent our being mistaken as to what we accept, not only as successions of events, but as facts or events in the past, before we can judge confidently which among them will be repeated. It was long unknown

to man that the earth on which he lives rotates on its axis and travels round the sun, that the stars are larger than the moon, that the clap of thunder and flash of lightning proceed at the same moment of time from the same thunder-cloud, and that magnetic and electric influence is transmissible almost instantaneously through thousands of miles of space. While thus in the dark concerning the past and the present, he could not see clearly into the future.

When, from the events or successions of events which are beyond the control of man, we turn to those in which he takes part himself, we see at a glance that each advance of knowledge and each modification of conduct resulting from it introduce altered events and altered successions, and must also modify the future. The age of stone, of bronze, of iron, and again the age of printing, of steam, of electricity, must each modify our anticipations of the future, if they are to be eventually verified.

Man progressing from ignorance to knowledge, from barbarism to civilization, must be reckoned as a variable, not as a constant among the powers, if we would anticipate with certainty, from the combinations

and successions of the past and present, the combinations and successions of the future. If the phenomena resulting from given elements and their combinations are our warrant for predicting similar phenomena from similar elements and similar combinations, we must at least be inclined to suspect that different phenomena will follow from altered elements and altered combinations.

If man had continued from generation to generation a being unaltered in every respect, his future might be expected to resemble his past quite as reasonably as we expect certain future physical phenomena to resemble the past. But we have already learned enough of our history and constitution to have no doubt that man, so far from continuing unaltered in all respects from generation to generation, has undergone, and is undergoing great changes in many respects.

However confident we may feel in some of our predictions, it is scarcely possible for anybody who has engaged in such investigations to fail to be impressed, even at this early stage, with a sense of the difficulties in the way of making other predic-

tions in which we can place equal confidence. The wider range of our knowledge enables us, it is true, to make predictions which were beyond the reach of our forefathers, to correct predictions in which they are seen to have been mistaken, and to reject predictions for which we have discovered that they had no warrant. Knowledge of the future, as well as of the past and present, simple and easily to be acquired as much of it seems to be in the forms in which it is presented to us, is frequently most complicated and difficult of access. Close application, however, makes us sensible that our inability to prognosticate the future is generally owing to our ignorance of, or imperfect acquaintance with, the past and present. Nevertheless, based as our knowledge of the future must be upon the present and the past, it is not a mere copy or repetition. Our knowledge of the future is obtained rather by projecting the past and present, as we have interpreted them, upon the future, than by assuming that the future will be the past and present over again. There are, as we have already seen, many rapidly recurring successions. But concurrent with them are successions which

recur at longer intervals, and never-ceasing changes in which recurrence has not yet been traced by man, and in which he suspects that he will be unable to discover any recurrence.

Because many of our predictions of the future assume a similarity between the future and the present and past, we must not conclude that our knowledge of the future is necessarily thus confined, or that we shall be free from error if our prognostications concerning the future are always made by simply assuming a recurrence of sequences among which we have traced a connection of cause and effect in the past. Our knowledge of the past is a knowledge of the frequent occurrence of events and phenomena, not repetitions of the past, interwoven with others which are repetitions. There have been quick and slow recurrences, and sequences wherein consequents never before observed have followed, and so followed as to satisfy us that they could not but follow, and that they themselves will be followed by consequences which must be deviations in some respects from former consequences.

In the continuous current of events and of suc-

cessions of events and phenomena, man may be said to play, in one sense of the word, a very insignificant part. But his part is by no means insignificant when considered in its bearing upon his own well-being. If his present is different from his past, and his future is likely to be different from both—if his states of well-being at successive periods have not been a succession of repetitions from some early state, the reason for that will be found in the altered attainments of man himself. He evidently presents himself, not as a constant but as a variable quantity in the successive combinations which we have to examine. To estimate his influence as the same, because he retains throughout all his changes the name of "man," would be about as sensible as to confound one of our large ships propelled by steam with the ship in which Columbus made his discovery of America, because they have a name in common. But we will not attempt to trace the influence of so complicated a variable as man till we have bestowed some attention upon other variables which also require to be examined.

Leaving man aside, we shall find indications in

abundance of change presenting, to all appearance, indefinite successions without recurrence, in action concurrently with repetitions recurring, some at long and others at short intervals of time. If we can discover any additional hints to assist us in prognosticating the future of the human race by their examination—if we can throw any light forward upon the future by tracing the order of apparently indefinite change in conjunction with the order of rapid and slow recurrences, we shall enter more hopefully upon the work of estimating the influence of so complicated a variable as man himself.

Astronomical phenomena supply us with examples of all these kinds of recurrences, and of occurrences in which recurrence has not yet been discovered. The sidereal day and the solar day are both consequences of the uniform rotation of the earth on its axis. The uniform recurrences of change in the position of the moon in regard to the earth, have given rise to the ever recurring phenomena of ebb and flow of tide and of new and full moon. The end of one year and the beginning of another are but the completion of one journey of the earth

round the sun, and the commencement without break or interruption of another. The other planets make their journeys, some in less than a year, and others occupy ten, thirty, and one hundred of our years in one of their journeys. The comets as they reappear, with the occasional advent of one whose previous appearance had not been noted, are examples of recurrences at long intervals, and perhaps of occurrences, recurrence in which cannot yet be said to be established. When from the study of these we proceed to that of the so-called fixed stars, at distances so great from us as to be immeasurable, we are almost obliged to be satisfied with our knowledge of the recurring changes in their appearances occasioned by the changes actually recurring in the earth's position.

The study of terrestrial phenomena unveils to us, among recurrences, a succession of changes in which, so far from expecting to discover any order of recurrence, it only seems open to us to calculate what is likely to be the accumulated effect of them at some great distance of time. We have the uninterrupted recurrence of vapours rising from the surface of the

earth, and their condensation in rain and snow by which the supply of water in our numerous rivers is renewed as fast as it is drawn towards the sea. If we watch one of these rivers flowing through a lake, which it enters thick and muddy, carrying with it earth and stones, and leaves at the other end bright and clear, our thoughts must run upon the probable consequences of this incessant deposit upon the extent and depth of the lake. It is calculated that thousands of tons of earth are carried every year into the sea by such rivers as the Mississipi and the Ganges.

The changes wrought in the channels of rivers according to the soil and configuration of the country through which they flow, afford another example of uniform recurrences, interrupted at long intervals by occurrences, the effect of causes long in operation. The waters wend their way from the upper to the lower level, turned aside by every obstruction in the shape of higher ground which they meet in their course. The length of a river may thus be three or four times that of a straight line drawn from its fountain head to its mouth. At each bend, however,

the waters beat against the opposing height before they turn aside; and it depends upon the soil or rock, and the force of the stream, whether it will be tens or hundreds, or thousands of years before the obstruction gives way and allows the stream to pursue its direct course to the sea, or whether the obstruction will maintain its position to the end.

The alternations of cold and heat, of ice, water, and steam, are constantly detaching masses of rock from the mountain heights. These find their way into the valleys to be further disintegrated by the same causes. The examination by geologists of the structure of the earth has brought to light formations, which it must have taken ages innumerable to accomplish; and which afford indications of changes of temperature and distributions of earth and water quite incompatible with the supposition that the successions and recurrences of which the records of modern times are made up are uninterrupted repetitions of similar successions from the remotest antiquity.

Vegetable life brings before us still more closely every variety of example of early and deferred recur-

rence, with an intermediate succession of changes in which repetition is less, if at all, observable. With each revolving year we see the grain of wheat developed into the perfect plant, while no less than revolving centuries will exhibit to us the acorn developed into the full-grown oak. In the grain of wheat, however, there is a succession of changes, independent of recurrence, quite as much as in the acorn; and together they present opportunities for studying, in crop after crop, the order of recurrence in both.

Proceeding on from vegetable to animal life, the variety in the periods of time at which recurrence may be noted is equally striking. If no animal can vie with the oak in longevity, the vegetable kingdom, perhaps, hardly supplies us with examples of much more brief periods of existence than the animal kingdom does, when our powers of observation are assisted by the microscope. But even in those which are too minute to be seen without the aid of that instrument, there is generation, growth, developement of organization, and decay, offering to us, as matters for study, successions independent of repetition in each individual, combined with repetition in the species and genus.

Man takes rank among the more long-lived animals. Looking at him, therefore, in his individual capacity, we see great scope for study in the process of his development—a word which signifies changes other than those included under the word recurrence; and we are able to trace an order of growth to be succeeded by an order of decay.

There is little difference to be noted between the order of recurrence in the animal and in the vegetable kingdom till we come to man. Each species of plant and animal seems equally to repeat itself, modified to a certain extent by circumstances external to themselves, particularly those brought to bear upon them through the action of man. Cultivation, domestication, transposition, and other treatment adapted to bring about changes sought for by him, have introduced occurrences which can scarcely be said to be repetitions of former occurrences.

But states or occurrences such as these, which cannot be classed among repetitions of former states or occurrences, remarkable as many of them may be, are insignificant compared with the changes noticeable in the generations of man. It would be a misrepre-

sentation of the order of occurrences in the human races, so gross as to be obvious to the least reflecting, to pretend that each generation has been a mere repetition of former generations. Recurrences and repetitions, numerous as they may have been, in the successions of generation after generation, have been mixed up with other occurrences, the like of which are not discoverable in the past.

The study of the future—the guidance of our anticipating faculties, demands more than an acquaintance with the order of succession in the past, and an assumption that the same order will recur in the future. There have been other changes in which something more than repetition has been observed in the past, and our anticipating faculties have to be guided so as to assist us to learn, if possible, whether similar novelties with their consequences will or will not occur in the future.

Most intricate as well as most interesting questions are here presented for our investigation and solution. And while we approach them, fully sensible of the difficulties, great enough, perhaps, to baffle us occasionally, we need not be disturbed by

the assertions of those who pretend that there is no certainty in the future, nor fear to be confounded with those noisy and presumptuous individuals who vaticinate on the future, while not only uninformed concerning the sequences and recurrences of the past, but unconscious that information concerning the past must be the foundation for whatever knowledge we can hope to acquire of the future.

We will now endeavour to recapitulate, in a few words, what we think we have accomplished towards facilitating our main inquiry.

1. We may dismiss, as mere unmeaning talk, all expressions which either directly assert or indirectly imply that we know nothing concerning the future. We know that if we acted as though the future were unknown to us, we should soon cease to live. Provision for the future implies knowledge of the future. If we cannot understand one another's language when we talk of the future, the difficulty must be in the words, not in the future, for the accurate representation of which words fail us, or we fail in the use of them.

2. Our knowledge of the future is wholly derived

from our knowledge of the past and present, which we are able, as it were, to project forward, so as to be conscious that we know concerning the future quite as accurately as we know concerning the past and present.

3. The knowledge of the past and present which we are enabled to project upon the future has been derived from observation, experiment and reflection, through the continued cultivation of our observing and reflecting faculties, and aided by our power of communicating with one another and of recording the results of experience.

4. That knowledge of the past and present which we specially wish to master as a means of prognosticating the future, is the knowledge of cause and effect, and as a help to this, of the elementary bodies and their combinations, with their affinities, attractions, and repulsions.

5. As our knowledge of cause and effect has been enlarged from age to age, and as opportunities have occurred for verifying and correcting the prognostications of former times, our thoughts have been directed to the nature of the elements which may be expected to introduce variations into the course

of the future; and hence our faith in prognostication is regulated and continued, and strengthened.

6. In the successions of the past which make up the history of the world, we have discovered various orders of sequence—orders of recurrence at long and short intervals, and orders of growth or development, in which recurrence has not been discovered, nor even supposed to be discoverable.

Whatever other difficulties there may be to master in our efforts at prognostication, and in distinguishing the true from the false, and the reliable from the unreliable, in the prognostications or pretended prognostications of others, two most formidable have been cleared away.

All prognostications which are not drawn from observation and reflection on the past and present may be unceremoniously dismissed. They should not be permitted to distract our attention, to rob us of our time, or to entangle us in controversy and disputation. If such prognostications are irreconcilable with those drawn from our own reading of the past and present, they must be dismissed as false, however pertinaciously they may be pressed upon us.

If they are merely unreasonable, *i. e.* deriving no countenance from the past and present, they must be disregarded as the hallucinations of a disordered intellect, or the ramblings of an ill-regulated imagination.

We may banish from our thoughts all feelings of despondency and discouragement while attempting to lift the veil which hides the future from us. Every step that we have made in tracing the order of sequence in the past and present has expanded the horizon within which our knowledge of the future is circumscribed. We have but to persevere in the study of the order of sequence in the past and present, assured that every advance in that will bring with it increased knowledge of the future.

As to doubts concerning the importance of attaining to a capacity of prognosticating the future correctly, they will be removed by the most cursory glance at a few of the many questions which continually agitate society:—

What will be the character of future harvests, and what consequences will follow according as they are abundant or deficient? Are visitations of pestilence and epidemics to continue as heretofore? How

long will large masses of human beings be as badly lodged, clothed, and fed as they now are? How long will men whose modes of living are perpetually at variance with their professions, or who are even careless about understanding what they profess, be reputed good, virtuous, exemplary, pious, religious, and respectable? How long will many of the strongest, boldest, and most enterprising of our race all over the world be employed in destroying one another's lives and property, and in preparing either to do so, or to repel the attempts of those designing to do so? Will friendly feelings between the nations of the future be notified as now by an interchange of visits on board vessels, provided with the most formidable armaments that human ingenuity can contrive? Will the generations to succeed ours contain as large a proportion of drunken, profligate, and untrustworthy individuals? What will be the prevailing thoughts concerning prodigality of expenditure in the midst of destitution? Will there be a renewal of existence after death? and will it be in the flesh or otherwise? Will it be one of pain or pleasure, or mixed of the two? and will that be

determined by conduct in this life? Will posthumous existence be a state of suffering intense and everlasting to the larger portion of mankind? Will the greatest of criminals be able (as frequently encouraged to hope by the judge who condemns them) to escape this suffering? and how will it fare with those who pass on earth for the best conducted and most useful members of society?

When these questions are followed up by another which can scarcely fail to be suggested by every one of them: Can man do anything, and what, to determine the kind of future to which these questions point?—to listen to them and to understand them must also be to acknowledge the importance of a capacity for prognosticating, to strive to acquire that capacity, and to resolve to leave no effort unmade in order to bring about that future, and those thoughts of a future, which will most conduce to human well-being.

Students of the present day, striving to acquire a knowledge of the future, should not be forgetful of the advantages which they enjoy, as compared with their predecessors. Never before was there so large a number of prognostications of events and pheno-

mena on record ready at hand for examination. The stream of time, which has been continuously passing the future into the present and past, has shown how far actual events and phenomena have corresponded with those prognosticated. Where the grounds of the original prognostications have been given and preserved, additional facilities are presented for studying in what respects the grounds which led to false prognostications were mistaken, and wherein they differed from those which led to true prognostications. A perception of the process by which the true prognostications of the past were made, and of that by which prognosticators were misled into the false, must greatly assist those who are anxious to discover the true and avoid the false in their own prognostications. It is needless to point out the increased vigour which will be imparted to conduct, by a nearer approach to certainty, as the consequence of being able to distinguish reliable from unreliable grounds for prognosticating the future, and where it is independent of man's intervention, and judicious from injudicious efforts for bringing about a future, where it is partly dependent upon his intervention.

CHAPTER III.

KNOWLEDGE OF THE FUTURE BASED UPON OBSERVATION AND EXPERIMENT NO LESS THAN KNOWLEDGE OF THE PAST AND PRESENT.

We cease to wonder at the readiness with which our ancestors yielded belief to anybody who undertook to forecast the future, when we consider that they were quite as much interested as we are now, and as our descendants will be, in what is likely to happen; and that, ignorant as we are, they were still more ignorant of the method by which knowledge of the future is obtainable. Indeed, there are people enough in the world at the present day so ignorant and so prejudiced and superstitious, that the study of the thoughts, feelings, and doings noticeable among them enables us pretty well to judge what they must have been universally, when all people were ignorant or prejudiced and superstitious.

We do not use these words "ignorant," "pre-

judiced," and "superstitious," unadvisedly. By "ignorant," we mean "feeling and acting without experience, or independently of experience;" by "prejudiced," "feeling and acting upon misconceptions of experience, or contrary to experience rightly interpreted;" and by "superstitious," "feeling and acting in the same manner, particularly in regard to the supernatural."

In those ages and those parts of the earth in which man has been seen least raised above the brute, knowledge of the past is little more than recollection of pleasures enjoyed and pains endured, associated with the assumed causes of them; knowledge of the present little more than a sense of pleasure and pain, of indulgence and privation associated with efforts to procure the one and to ward off the other; and knowledge of the future little more than hopes and fears, with readiness to listen to anybody hardy enough to promise the indulgence hoped for, or immunity from the suffering feared.

Men could not have advanced to the agricultural or even to the pastoral state, without having acquired some knowledge of the succession of the seasons.

But before they had made these advances or acquired the knowledge that must precede and accompany them, sorrow and disappointment and suffering must often have been endured from disease and starvation, from murrain among flocks and herds, and from failure of crops, occasioned by changes of weather familiar to us, but which had then to be learned. People were not the less sensitive to the blessings of numerous and thriving flocks and herds, and of abundant crops, nor to the suffering consequent upon murrain and famine, because they were ignorant of the causes of them. Neither, while their memories were vividly impressed with the occurrences of the past, could they be free from hope and fear, nor be otherwise than anxious to adopt any expedient suggested to them for securing abundance and averting privation in the future. The history of the world is little more than the history of expedients, some partly and some wholly futile to accomplish their purpose, from among which by slow degrees men have been, and are, learning to distinguish the more from the less effective, and to eliminate the ineffective from both.

One can imagine, from what we have observed and read of savage tribes, that men have lived for ages alternating between experiences of pleasure and pain, of enjoyment and suffering, before they arrived at any thing like what we should call a knowledge of the causes of them. They would, no doubt, soon have associated food with the pleasures of the palate and with relief from the pain of hunger, and clothing and shelter with comfort of body and with relief from discomfort and acute pain; but why food, clothing, and shelter, should be abundant, scarce, or inaccessible, or why sickness and other calamities should fall upon them, they might neither know nor think it possible to learn. After a time they might fall into a belief that good and evil spirits, although invisible to them, were hovering around and ruling their destinies, that these spirits were to be influenced by the sound of human prayers and vows, or by the sight of self-inflicted torments, that their intentions were to be divined by the flight of birds, by the examination of the entrails of slaughtered cattle, or that they occasionally made known to a chosen few some of the events of the future in dreams and

visions. Long before such imaginary causes of future good and evil could be discovered to be inoperative, long before the means founded upon them to procure good and avert evil would be abandoned, other causes less inoperative and other means less inefficient would be combined with them. After suspicions had been aroused, and even after intelligence had been awakened to the conviction that causes formerly relied upon were mistaken, and the means suggested by them had been resorted to in vain, they would be retained, perhaps by mere force of habit, side by side with other causes and means evidently capable of influencing the ends sought for.

Arrived at this stage, what is it that is forced upon the attention of all thoughtful men? That the future is entirely unknown? that every thing which might be known, has been learned? that no mistakes have been made in prognosticating the future? that human conduct does not influence the future? or that, having influence, the conduct adapted to influence the future as it is wished, has always been the conduct fixed upon?

The answer to each of these questions will be in the negative, and without the slightest hesitation. If the future were entirely unknown, and believed to be unknown, cause and effect, means and ends, prudence, economy, and forethought, would be unmeaning sounds; since, as generally understood, "effect" means something that will and must follow something else which has gone before, and prudence, economy, and forethought, all mean disposition and conduct which indicate a due regard for the future. As the stream of time flows on, that which had been future becomes first a portion of the present, then of the past; and the opportunity is presented of verifying what had been conceived to be knowledge of the future. Men, however, were long unequal to the task of verification. They are now attaining some proficiency in it. By comparing their past conceptions of the future with that future as it came upon them to be recorded in the present and the past, they have found that many things which they had prognosticated did not occur, that many things did occur which they had not expected, and that some of the means employed by them had

not led to, perhaps had led away from the future which they longed for.

It will be well to test, even at the risk of some repetition, the fidelity of this representation of the process by which past and present, and afterwards present and future, have been connected together in people's thoughts as cause and effect: subsequent reflection leading sometimes to the abandonment, sometimes to the modification, and sometimes to the corroboration of former conceptions. The introduction of other antecedents and consequents, or the elimination of some of those previously admitted, has often been seen to be necessary to complete the connection of cause and effect last adopted, subject to future correction.

Looking back over an interval of forty years from railway travelling, as we now see it conducted, to railway travelling as projected by George Stephenson and his associates, we have an epitome of the history of progress which would serve in many respects for the elucidation of all progress from the beginning of recorded time. It cannot be said that the projectors of railway travelling knew nothing of the future.

For they knew the fares which travellers were prepared to pay for conveyance, that the number of persons who paid them had been steadily on the increase, and that the causes which produced that increase were growing in strength. They knew, also, what the power of steam had been brought to accomplish, the quantity of steam which might be generated by a lb. of coal, and they suspected that nothing was required but sagacity and skill on the part of man to contrive an engine in which coal and water might be so used as to enable it to propel itself, and to draw with it a train of carriages and trucks. They knew that a road of iron on which the wheels might run would, by its smoothness, diminish friction, and by its strength and durability sustain great weight, and resist wear and tear. And they calculated that if they could but succeed in executing what they projected, they would be able to convey passengers and merchandise at greatly less cost, and, by diminishing fares and rates, obtain extended employment as carriers, and ample remuneration in the excess of receipts over outlay. Here we have knowledge of the past and present, expecta-

tion of the possibility of a better application of that knowledge to produce new results in the future, and inducement to attempt this better application in the increased profits likely to wait upon success.

The outlines of railway history must be familiar to most people. The projectors had persuaded themselves that there was an opening for the successful application of well-known forces to a new purpose. It was necessary for them to persuade others so as to attract co-operation sufficient to carry out the work; and they could not move without the consent of the legislature. They had to battle against ignorance, indolence, and prejudice, to obtain the co-operation and consent required. They had many other preliminary difficulties to overcome. And after experiment had shown that some of their readings of former phenomena and anticipations of future results had been mistaken, the career of themselves and of those who followed them has been the confirmation of some effects expected, the disproof of others, and additions, rejections, extensions, and modifications, in order the better to accomplish similar effects and produce new effects. In like manner, the working

of railways has given rise, first, to the adoption of a set of regulations and arrangements based upon experience, *i. e.* upon knowledge already acquired; and, subsequently, these regulations and arrangements have been retained, modified, extended, and abandoned, according as further experience has confirmed their fitness, or has suggested the expediency of resorting to better means for the speed, cheapness, and security of locomotion and transport.

A comparatively trifling circumstance connected with railways, affords an admirable illustration of man's conception of a future, of his proceedings in order to accommodate himself to that future, and how he afterwards discovers in what respects he had misconceived the future which eventually came upon him. Every line of railway, as is well known, crosses numerous common roads and paths. Railways, when first designed, were made to cross many of these roads and paths on a level, gates being relied upon to close the passage when trains were expected. Subsequent experience, particularly after the traffic on the rails had increased greatly beyond the original expectations, showed the danger and incon-

venience of trusting to this imperfect means of preventing collisions; and most of those level crossings have been replaced by bridges over or tunnels under the railway. Occurrences such as these in every branch of industry, and frequently repeated, ought to suffice to banish for evermore any difficulties that may still prevent a few from understanding man's position in regard to a future; how he anticipates it, misconceives it, corrects his misconceptions, adopts contrivances for bringing about one future rather than another, and then improves upon those contrivances.

As one means of testing what we would venture to call our knowledge of the future, we might be asked some such question as, "Will famine and pestilence ever again visit this island?" And we should at once acknowledge our inability to answer a question so put, and admit that we do not know. Nevertheless, we might say that we do know that neither famine nor pestilence will ever again be as fatal as they have been in former times. Of famine we can speak more confidently than of pestilence. The causes of it have been better ascertained. Men

have advanced step by step to a capacity heretofore unknown for extracting large crops from the ground, for preserving the superabundance of one season to meet the deficiency of another, for rearing, feeding, and protecting live stock, and for drawing supplies from an area almost co-extensive with that of the whole earth. The nearest approach to such a calamity of late years was when famine visited the sister island, and immense contributions towards its relief were made in a season of more than ordinary scarcity. Knowing all this in the past, knowing besides that the causes which prevent scarcity have since been and are steadily in the ascendant, and bearing in mind that knowledge of the future is but the extension to the future of causation thoroughly established, if we are not warranted in affirming that famine will not recur in this island, we may safely predict that there is little probability of its recurring.

Of future pestilence we must be resigned to speak with less confidence, because our knowledge of the causes of past pestilence is less advanced. But we have ascertained some of them, and in keeping them out of the way, the pestilence of old has been

softened into the epidemics of our times, which have also diminished in frequency. Wholesome and abundant food, pure and abundant water, attention to cleanliness and ventilation, and adequate shelter and clothing, with habits and intelligence qualifying to make a good use of the resources of wealth, have been discovered to be the best preservatives of health, and consequently the best securities against pestilence.

Progressively as the true causes of disease became known, the imaginary causes which had been believed in relaxed their hold over feelings and conduct. It will not of course be lost sight of that causes, which we now perceive to be imaginary, had at the time as powerful influence over peoples' thoughts and conduct as though they had been real. This explains why people suffering from pestilence or other grievous calamity which they believed to be inflicted upon them by an offended deity, or some other evil spirit, tried to propitiate him as the cause of their misery. And as the anger of this deity was, besides being a cause of human suffering, the effect of human conduct, the means of propitiation varied

according to the notions formed of the attributes of the deity; according to the notions prevailing as to how he had been moved to anger, and how he might be brought to lay his anger aside. Various as have been the ways adopted by man, at different times and in different places, for propitiating offended deities, in one particular they have been the same. The torment of his fellow-creatures or self-torment in some of its many varieties, has ever been the form of propitiation held to be most acceptable to an offended deity. The sincerity of man's belief in imaginary causes, so long as they are not perceived to be imaginary, cannot reasonably be doubted. The incredulous may read the confirmation of it in the human sacrifices, massacres, tortures, martyrdoms, penances, fastings, prostrations, and humiliations; and in the extravagant rejoicings, thanksgivings, and adulations of the deity when his craving for human misery seemed for a time to be satiated.

The history of navigation, of the precautions against shipwreck, and of the means prepared for the saving of life, affords another opportunity to the

thoughtful reader to observe the revolutions which have occurred among convictions and expectations in regard to the future, and to note the reasons for these altered convictions. Whatever objections may be urged against the form of expression in use, we think there are few people who would not say, "We know that henceforward voyages will be made more speedily, healthily, and safely than they were formerly; that shipwrecks will be less numerous in proportion to the number of ships afloat, and that a smaller proportion of shipwrecked people will lose their lives." If asked how they acquired this knowledge, their answer could only be, "By comparing the voyages, wrecks, and mortality of the present with the past; by noting the means which have been employed to accomplish each successive improvement, and the later means for the same purpose which have not yet had time to produce the effect expected from them." The ever-extending range of our knowledge of cause and effect, the separation and rejection of spurious causes, the better contrivances, based upon that knowledge, of means to accomplish ends, and the substitution of

efficient for inefficient means, are the justification of our altered expectations of the future, and of our abstinence from forming expectations concerning matters on which we have no experience to guide us.

That our knowledge of the future is very limited is not to be denied. But it is growing with our knowledge of the past and present; and the researches in which so many are engaged, prove how much more they are hoping and expecting to learn.

This state of hope and expectation is encouraged by the knowledge of the number and magnitude of the discoveries which have rewarded, and are continually rewarding the efforts of inquirers.

Man's misdirection and confusion of thought concerning the future are consequences of ignorance and prejudice, not only of his own, but of the ignorance and prejudice of others, in the guise of knowledge, pretending to enlighten him. Their hold has been strengthened by an imperfect appreciation of the limited function of language as the helpmate of knowledge. All our knowledge is derived from observation, experiment, and reflection; and lan-

guage enables us to record it, to assist our memories, to enlarge and strengthen the feeble powers of memory, and to enable us to communicate with one another. We are sensible that without the assistance of language our knowledge would be less than it is. But it must be kept constantly in view that language can do no more than record what observation, experiment, and reflection convince us of. It should assist us to preserve order in our thoughts and convictions, not to throw them into obscurity and confusion. When it is said, then, that we know nothing of the future, or that there is nothing certain in the future, let us endeavour, rather than engage in a war of words, to ascertain what it is that we are all conscious of in regard to the future.

As soon as we fix our thoughts upon ourselves, ever so slightly, as beings desirous of something more than mere animal indulgence, the future forces itself upon us. Without some sense of a future, man would be altogether a different kind of being to what he is. His sense of a future expands into a variety of forms. Images pass before him of

things pleasant and things painful; of recurrences, at short and long intervals, of things which he can bring about, of others which he cannot; of variations of wind, and weather, and temperature, the order of recurrence in which is very different from that of the tides, or of the succession of day and night, or of eclipses and transits. With this consciousness of his, extending age after age over a much wider range than was opened to his ancestors, ought he not to give expression in words to what he is conscious of?

It would sound strange to the farmer sowing his corn, to the smith hammering his iron on the anvil, to the machinist constructing a locomotive, to the engine-driver feeding it with water and fuel, to the captain loading his ship for the antipodes, and to the electrician planning a submarine telegraph, if we were to tell them that they know nothing of the future. They might ask, and in tones indicative of some astonishment: "Do you mean to insinuate that we are labouring in vain, or that we do not know what we are about?"

If the word "know" be inappropriate, if it have

the malignant effect of making us unintelligible, let us replace it with another. But if it be appropriate, or if we are compelled to retain it, let us recognize that we have a variety of feelings in regard to the future to which we are desirous of giving expression. Our consciousness of matters future assumes many forms. The coming of day, of the seasons, of eclipses and transits, of good and bad harvests, of arrivals in port and shipwrecks, of diseases and death, are all thoughts of a more or less probable future, to the two extremes of which we apply the terms "certain" and "uncertain," employing other terms to mark the gradations between them. Were we to dismiss these terms we should need others to note and distinguish future events, concerning which our states of consciousness vary so greatly.

As we are provided with no other term that we could use acceptably in the place of "knowledge," to express that of which we are conscious in regard to the future, our effort must be to use it discreetly, and to avoid saying "we know," where we have no warrant for saying so, or, what is worse, where knowledge, properly understood, might show that

what we would pass off under its name, was but the offspring of ignorance and presumption.

Not only, then, have we knowledge of the future, but our knowledge of the future, like our knowledge of the past and present, is very imperfect. We can speak and act upon some of it with confidence; but upon other parts of it only with doubt and hesitation. Some future events we look forward to as probable, and others as improbable, although possible. We even make calculations of the various degrees of probability. But all this knowledge of the future, and these calculations of probability, are drawn from observation, experiment, and reflection. Knowledge of the future must, therefore, be preceded by knowledge of the past and present. We may feel that some parts of what was called knowledge of the future in past days have been subsequently shown to be illusions; and we may suspect that parts of what we now call knowledge of the future may prove to be illusions also. We may feel that the range of our knowledge of the future is very restricted, and that our anxiety to learn more soars far beyond the limits which confine us; but if

experience have taught us anything, it ought to have taught us this:—That there is only one avenue by which more knowledge of the future can be approached, or the knowledge already reached can be purified from the superstition and prejudice with which it is defiled. Our knowledge of the future, whatever may be its ultimate extension, can only grow with our knowledge of the past and present, and for the extension of that we must rely upon observation, experiment, and reflection.

The student who is anxious to extend his knowledge of the future will not only find his efforts more certainly rewarded by confining himself to the method which we have indicated, but he will find this method admirably adapted to guard him against being imposed upon by bold and plausible soothsayers, who pretend to lay bare the events of the future. Let some future event which could not fail to be of deep interest to everybody, such as a coming famine or pestilence, the incorporation of the moon with the earth's substance, the absorption of the planet Mercury into the sun, or the destruction of the earth, be announced to him with the con-

fidence characteristic of those whose prophetic spirit disregards the restraints which thoughtful inquirers submit to: on hesitating to accept their announcements as indisputable truths, he might be asked reproachfully whether he intended to reject all prognostications of coming events. And if he answered that he did not, what else could he say, when summoned to explain why he would accept some prognostications, consider awhile over some, and reject others, except that his acceptance, whether immediate or deferred, must depend upon his knowledge of the past and present, as gathered, or to be gathered from observation and reflection? If he were told that the favoured possessors of the knowledge of such coming events had gathered their knowledge from inspirations, visions, or dreams, specially vouchsafed to them, or had deduced it from readings in ancient books, obscure and ambiguous to ordinary mortals, but full of meaning to them, and that what was required of him was acceptance with all humility and without criticism, he would at once call to mind many similar prophecies which had been uttered of old and never afterwards verified. He would be

strengthened in his determination to acknowledge no claims upon his faith in future matters far distant in time, except those based upon experience, by knowing that similar claims are made upon his faith in matters far distant in space. He sees around him people, we will not say pretending, but actually believing themselves to be gifted with clairvoyance, and to be in communication with what they call spirits who can announce contemporaneous events occurring in places far removed across oceans, mountains, and deserts, and not connected by telegraphic wires. He knows how often he has dreamed in his sleep and had his waking thoughts disturbed by hopes and fears of events distant, whether in space or time, and how he has driven them out by turning to his day's work. He suspects that they who, according to their own account, have some mysterious communication with a spiritual world, are afflicted with a not uncommon infirmity of believing in things beyond the reach of their senses, in time and place, irrespectively of evidence, and of mistaking for evidence that which they imagine to corroborate their belief. When one dream or vision

in a thousand seems, with the assistance of a little coaxing, to coincide with something real, the nine hundred and ninety-nine which remain unconfirmed, or for the confirmation of which it is not thought worth while even to look, are left entirely out of account.

It is not on every occasion that a spiritual communication is made with sufficient precision to admit of its being compared with the actual event when ascertained. Dreams and visions are often recalled after the events have been ascertained; and, without any intention to practise deception, if not found, are made to fit. Against all such deceptions, unintentional or intentional, whether the creations of ignorance and prejudice, or of trickery, there is but one safeguard—to test them by the achievements of observation, experiment, and reflection, in the past and present.

If dreams and visions, or passing cerebral images in our sleeping and waking hours, could be implicitly trusted as monitors of events far distant in time and place, there would be no occasion for laborious researches and calculations in laboratories and observatories, or for the extension of miles of continuous

wire. The monitions of experience make known to us the distant in time, and the monitions of the telegraphic needles make known to us the distant in space, if carefully attended to. That looseness in dealing with evidence—that unconscious falsification which will turn dreams and visions into spiritual communications, would deprive us, if weak and silly enough to be imposed upon, of all the knowledge of the distant in time and place which we derive from experience and telegraphy.

When prognostications of the future are irreconcilable with the past and present they must be false. When they are in no way connected with the past and present, as known to us, they are naught but creations of the fancy, neither supported nor contradicted by the past and present. But when they are based upon the knowledge of cause and effect, gathered from observation, experiment, and reflection, in the past and present, we may rely upon them in the future with one proviso, viz. that there is no cause still hidden from man destined to neutralize or counteract those causes which are known to him, and the effects of which he has computed.

CHAPTER IV.

THE PRESENT AS DERIVED FROM THE PAST.

To be able to predict concerning human affairs, concerning states of human well-being, after having ascertained past events and their successions, we have not only to recognize an order of recurrence, but we must also have learned to infer the order of altered occurrences from the previously observed changes in the agents which have been at work to influence the future events and their successions up to the present time. Wherever new elements or combinations have been observed in the past, new consequences have been seen to follow. Wherever new elements or combinations are observed in the present, new consequences are to be looked for in the future.

There is an order of change or of altered occur-

rence to be studied, as well as an order of recurrence or repetition, if we would have our prognostications of the future verified in the future. There are barren rocks, ice-bound coasts, and uninhabited islands which we can readily imagine to have been the scenes of uninterrupted recurrences of phenomena for thousands of years, and might infer that they will remain unaltered in the future. There are other parts of the earth, long known to have been the residence of man, where the tides, the seasons, and the aspects of the heavenly bodies have been as uniform in their recurrence as in the uninhabited parts, but where man himself has undergone a variety of changes. It might so be that the order in these changes, if there be one, is undiscoverable. But it is evident that the attempt to prognosticate concerning future changes must be vain until we have discovered the order of past changes.

The past phenomena of the earth, of the elements which compose it and of the solar system of which it is a part, and of human society, present a remarkable contrast. Among the first we have been able to observe a succession of recurrences so uniform as to

lead us to assume that a similar order of recurrence will continue in the future, and to convince us that if mankind had not relied on such recurrence, and shaped their own conduct accordingly, their existence would have been endangered, if not brought to an end. Among the second, however much of recurrence there may be, it is so intermixed with change as to have made many despair of prognosticating with any thing approaching to certainty of the future.

It need scarcely be repeated that the desire to prognosticate, to learn, to know concerning the future, is not a mere idle curiosity; for to know what is discoverable of the future, and to regulate present conduct by that knowledge, is also to modify much of the future, so as greatly to affect future well-being.

The further back we push our researches into the history of the human race, the greater do we find the difficulty of separating fact from fable, illusions from correct representations, and truth from falsehood; but enough may be brought forth sufficiently beyond contradiction to satisfy us that within

the last two thousand years changes, some for the worse, but many also for the better, have occurred among the several families, tribes, races, and nations located in different parts of the earth. The names of Egyptians, Medes, Persians, Greeks, Carthaginians, and Romans, all call up thoughts of rise and fall, growth and decay, among large masses of men in different parts of the earth.

Progressively as the Roman empire fell to pieces and passed away, the nations of Western Europe advanced out of barbarism towards their present state of civilization. They have since been the principal actors in some of the most remarkable changes which have taken place in the destinies of the human race.

Till within the last few hundred years, the form and size of the earth were unknown to its inhabitants. The nations of Europe, Asia, and Africa had little communication and were imperfectly acquainted with one another. But they and the people of America, and Australia and New Zealand, were not aware of each other's existence. The discovery of America by Columbus, and the further discoveries

and enterprises consequent upon that, have led to occurrences which, at the least, must be admitted to be alterations, not repetitions, of former occurrences.

The scattered tribes of natives who subsisted by hunting have been either destroyed or driven westward from the Atlantic sea-board of North America, and their place has been occupied by upwards of thirty millions of people of European descent.

In South America the European has also become the dominant race; but the natives have been less completely supplanted.

Australia was found to be comparatively unoccupied, the natives being few in number, and scarcely to be recognized as human beings. The animals, vegetables, and seeds available for food, clothing, and other purposes of human sustenance were few, and of a kind previously unknown. In less than a century that land has become the residence of more than a million immigrants from Europe and their children, with millions of sheep and thousands of cattle, and all the contrivances and appliances in use elsewhere to promote healthy and comfortable existence.

The fate of New Zealand, as connected with Europeans, seems rather to resemble that of North America than that of Australia. The first immigrants from Europe did not find it unoccupied. But the natives were few, compared with the extent and fertility of their territory. And few as they were, they have since been dwindling away gradually as the new comers have increased and spread over the land.

While the inhabitants of Western Europe have thus swarmed forth and taken possession of lands, the existence of which was unknown to their forefathers, some remarkable changes have occurred among them at home. Let us fix our attention chiefly upon the most western portions of Europe, the British Islands. Since the discovery of America and Australia, and other contiguous lands, the inhabitants of the British Islands have increased ourfold; famines have ceased to visit them; the average duration of human life has been lengthened; their food, clothing, and lodging, insufficient as they may still be, have been improved in quality as well as increased in quantity; epidemics are less frequent and less virulent; and disease and wounds are more

successfully treated. Their towns and dwellings are better cleaned, watched, and lighted; and instead of being cut off from communication with one another and from the various regions of the earth for protracted intervals, and being confined to precarious and tedious modes of intercourse, the locomotive and the steam-ship have brought places distant from each other in space near to each other in point of time, and the electric telegraph permits daily interchange of news throughout the whole of Europe.

Before we pronounce any opinion, or make an opening for any controversy upon these changes—whether they be for the better or the worse—let us recognize that they are changes, not recurrences, and that they have occurred in parts of the earth where day and night, the seasons, the tides, and numerous other phenomena, recur with unbroken regularity. The order of recurrence in phenomena has been studied, and the recurrence of many future phenomena is relied upon because similar prognostications on similar grounds in the past have been verified by the events. It remains to be inquired whether the changes in store for us can be foretold as confidently

as the recurrences, or, if not, whether the greater or less probability of some changes rather than of others can be foretold. Upon the result of this inquiry must depend our hope of being able to make any prognostication concerning the future of the human race.

If, in contemplating and studying the circumstances in the midst of which we live, we can discover the causes which produced them; if, in other words, we can discover the circumstances in the past, without which the present, as it is, could not be, we may be helped to a knowledge of the future which must follow from the present, and to a knowledge of what cannot follow, things in the present being as they are.

A few examples, taken at random, will serve to test and illustrate the reasonableness of expecting favourable results from such a course of inquiry.

Take one of our large cities, with its houses, public buildings, streets, contrivances for supplying water and gas, and for removing its filth; we cannot fail to recognize that these works must have been preceded by men capable of executing them. Had there not been men, there would be no city. Had

there only been men less capable, there would be no such city. The records of the past corroborate this statement. They tell us when cities thus provided with contrivances for securing the health and comfort of their inhabitants were unknown; and they also tell us that men in those days had not the capacity so to provide themselves. It seems to follow that we need not hesitate to affirm that if men were to lose any portion of the capacity which has enabled them to provide such cities for themselves, the cities of the future must deteriorate from men's diminished capacity; and that if men were never to become more capable than they now are, cities free from the numerous defects which still disfigure them would never be forthcoming.

Let us next direct our thoughts to the numerous fleets of steam-vessels which enable us to keep up regular communications all over the globe, in defiance of calms and adverse winds and currents. These vessels would not be at our disposal if there had not been men capable of contriving, building, and equipping them. And when prepared, as they are, to enable navigators to make their passages from

port to port within certain limits of time and security, their being thus prepared would be vain, if competent navigators were not at hand ready to direct them. Not only, then, may it be affirmed that similar rapidity and safety of transit could not continue in the future if vessels and navigators of equal capacity were not to be had, but that the generations to come after us must submit to be excluded from the enjoyment of greater speed and safety of transit, unless vessels and navigators of superior capabilities can be elaborated.

If we turn to the consideration of what is going on, both indirectly and directly, to raise raw produce from the ground, we find proofs in abundance to convince us that the large and varied supplies of materials for food and raiment which we have been able to maintain in face of an increased consumption, are a consequence of accumulated powers of production in the shape of implements of husbandry, manures, flocks and herds, and of men qualified to apply them. It must be obvious to everybody, that the store of materials for food and raiment now in our possession, such as it is, must have been pre-

ceded by the powers of production just adverted to, and that any increase of this store in future, must be preceded by increased power of production.

We might follow a similar train of thought, and continue a similar process of investigation through every department of industry, and the conviction would not be shaken, and scarcely need to be strengthened, that our present store of the necessaries and comforts of life, such as it is, must have been preceded by the means of production familiar to us all, conspicuous among which are the intelligence and aptitude of the men by whom the other means must have been devised and applied. There is no escape from the admission that any future increase of this store must be preceded by increased industrial capacity in man himself.

It will not be a misapplication of time and labour to turn once more to the consideration of the grounds of the confidence with which each nation, community, or separate gathering of the human race relies upon the continuance of its self-sustaining capacity. That this confidence is all but universally felt is obvious enough. It is not so obvious that

there are many who could account to themselves for the confidence which they feel. That confidence in a particular kind of future has often been proved to have rested upon no sufficient foundation, is well known to all who have bestowed thought upon the subject; and they may well doubt whether the confidence which they see to be felt by many in some future of their own may not also be misplaced.

There are two classes of forces which have co-operated to produce the stores of wealth upon which we depend for present subsistence—one, of the forces external to man; the other, of the forces inherent in man. Confidence in the continued replacement of this wealth implies confidence in the continuance of these two classes of forces. It is not pretended that our store of wealth would be maintained if men were to deteriorate in industrial capacity.

Upon the forces external to man there is no occasion to add to what we have already stated. The continuance of their action in the future is assumed. Care of course must be taken not to misread the past and present, not to mistake fictitious for real forces, and thus to assume the continued action of fictitious

forces in the future. If we could not discriminate between astrology and astronomy, we might rely with more confidence upon the predictions of Murphy and Zadkiel than upon those of Newton and Herschel; or the day upon which it is predicted that the sun and moon will pass away might be looked forward to as confidently as the days fixed for the eclipses of either of them.

But if the continuance of the forces inherent in man is also to be assumed, it would seem that something else must be assumed, since everywhere we see signs of the pains that are taken, well or ill directed, by each generation of men to call forth and cultivate industrial capacity in the generation about to succeed it.

It would shock common sense, it would be in direct opposition to the plainest experience, were we to affirm that industrial capacity, such as we are conscious of possessing, would continue among us if each generation were to suspend its efforts to impart this capacity to the generation about to succeed it.

If, then, we assume the continuance of industrial capacity in man as we assume the continuance of

the forces of nature external to man, we must assume the continuance of that solicitude for the welfare of future generations which has hitherto prevailed in all past generations. Parental affection, love of offspring, tenderness of feeling in adults for infants, is at the root of this solicitude for the welfare of future generations. It prevails widely in all communities, although it is far from being participated in by every individual. In those nations which may be taken as the better samples of our race, the feeling of parental affection has expanded into a sense of duty of adults in general towards infants in general; this wider feeling coming to the rescue of the infants who are not adequately cared for by their own parents.

In whatever light we consider the desire of providing for the welfare of future generations, whether it be altogether peculiar to our race, or whether it be a development of the love of offspring common to us with other animals, we recognize the differences of effect which follow according to the intelligence and skill which guide and direct it.

The various specimens of the human race with

which we have been made acquainted by historians and travellers enable us to observe some striking contrasts between those which we class as the most barbarous and those which we class as the most civilized. Our reasons for expecting the perpetuation of the first are not very unlike those which lead us to expect the perpetuation of the wild animals among which they dwell. We can feel little more confident of the perpetuation of the human race, while in the lowest stage of barbarism, than of the beasts of prey with which it is at war. It might be difficult to decide which of the two would be more likely to exterminate the other.

But when we turn to speculate upon the future of those specimens of the human race which we call civilized, there are reasons as strong for prognosticating concerning them as for prognosticating concerning the tides and the succession of day and night and of the seasons. Let us just take note of certain incontestable facts in connection with the more civilized portions of our race. They have accumulated stores of wealth sufficient for their maintenance in large numbers. They have acquired

the capacity to use them so as to extract from them much, if not all, of the comfort derivable from them, and to replace as fast they consume them. They have domesticated such of the other animals as they could turn to account for purposes of work, food, and clothing, and they have exterminated, subdued, or kept at bay the others. And inherent in them is the desire to see their children and children's children as well provided, and hence as capable as themselves, with the knowledge how to give effect to this desire.

If it is to be feared that these constituents may disappear, and with them the social state to which they give rise, equally it might be feared that physical constituents should disappear, and with them the chemical, mechanical, electrical, and astronomical phenomena resulting from them. But we assume the permanency of them all, and hitherto we have not been disappointed.

There is this difference between the causes or forces observed to be in action to produce the future, so far as it is independent of man, and those set in motion by man, or acting concurrently with him. The first are, so to say, unchanging; the second are

progressive. While the forces of wind, water, and steam, of magnetism and electricity, of gravitation, and of attraction and repulsion in general, are no greater, as far as we know, than they ever were, the forces set in action by man are not to be spoken of except as the forces of an altogether superior agent.

We should fail to form a just estimate of the increased and better directed forces set in motion by man if we did not take into account, besides his increased knowledge and his increased aptitude in applying it, his increased desire to direct it so as to promote the general well-being of his own kind. At each progressive step from the savage state up to our present state of civilization, we have seen the mere animal love of offspring swell into a thougthful solicitude for their intellectual and moral culture, and family affections expand so as to embrace within their folds, neighbours, fellow-citizens, countrymen, and more and more of the whole human race.

A glance at the modern history of our own country, which may be taken as a fair sample of the more civilized countries of the globe, will enable us to judge how far our statements and inferences have,

up to this time, been borne out. The slave-trade and slavery have been abolished. Restrictions on trade have been abandoned. In our criminal courts, thoughts of tormenting criminals have been replaced by thoughts of protecting society. In our civil courts, the desire of giving to all classes of society a cheap and ready access to justice has been gaining ground among legislators, statesmen, and judges. Improved means of collecting and distributing information, of transport and of postal communication, have brought, so to speak, every individual in contact with all other individuals in every part of the earth. Impressment has been discontinued. The practice of duelling is extinct. There is a growing anxiety to live at peace with other nations. And although crowds of children, for whose teaching and training no provision is made, and still larger crowds whose time is misemployed in schools, still admonish us how sadly the duty owed by adults to children is neglected and ill executed, the duty is no longer repudiated as it used to be, and people's eyes are opening to the misdirection which has hitherto characterized attempts to perform that duty.

Before we attempt to use our knowledge of the forces in action around us for the purpose of estimating and prognosticating the effects which we may reasonably expect them to produce on future social life, it will be well to have before us such facts in relation to the present as will be admitted without challenge by anybody. We have a store of wealth unexampled in former times, not only for its absolute magnitude, but for its magnitude relatively to the number of the people to be fed, clothed, lodged, warmed, instructed, comforted, and amused out of it. Mixed up with those who enjoy the blessings more or less derivable from this wealth, and from the capacity to earn and apply it, we have, spread over the whole surface of the country, numbers of people who seem to have no hope of escape from suffering from want of wealth, and from ignorance and incapacity how to use the little which they have. From five to eight per cent. of the entire population are maintained out of the poor-rates, and a much larger number are notoriously ill-lodged, ill-clothed, and ill-fed, their lives being saddened, besides, by the sickness and suffering of family and friends, and short-

ened by the overworking of frames inadequately sustained by diet, and unwisely stimulated by alcoholic drink. Thus, side by side with a store of wealth largely in excess of the stores of the past, we have numbers suffering and perishing from want, and from the ill-regulated use of the insufficient share of wealth which falls to their lot.

As our present state of society, with whatever we see to rejoice at or to deplore in it, must be accepted as the effect of all the causes—the result of all the forces heretofore at work—so our future state will be the effect of causes—the result of forces now at work. Unaltered causes and forces would be followed by effects and results, likewise unaltered; and altered causes and forces must be followed by effects and results corresponding to the alterations in the causes and forces which are to produce them.

To those who are indisposed to listen to prognostications concerning the future, based upon a careful appreciation of the causes and forces actually at work, let us remark, that neither they nor any men who have made the first steps out of barbarism, can avoid taking some thought of a future, however

limited the future may be. Even when prognostications, not so based, are treated with as much, or with more respect in words, they are seldom acted upon as readily. Leases are negotiated, granted, and accepted for ninety-nine years, in the face of prophets, who foretell the destruction of the earth far within that period; and deferred annuities are purchased, although assurances are given of a millenium without purchase, or the disappearance of the earth and the buyers and sellers upon it, long before the first payment will become due. Some future they must think of. The only choice presented to them is as to the future upon which they will allow their thoughts to rest. As with the smaller events of the future, and those affecting individuals, so with the larger and those affecting nations, or the whole human race, we cannot help prognosticating; but we may prognosticate with, as well as without, reason; and surely we ought not to hesitate between the two.

In the work which we have proposed to ourselves of acquiring knowledge of the future, it seems indispensable that we should have knowledge of the past and present to build upon. According to the breadth

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and solidity of this foundation will be the extent and usefulness of our superstructure. Part of our knowledge of the past and present actually consists, if it may be so expressed, of a past future—of past prognostications which have been tested, some which have been shown to be true or correct, others to be false or mistaken. Every former prognostication shown to be true, and every former prognostication shown to be false, must make future correct prognostication easier.

But the more we examine the past by the aid of the experience since acquired, the more we become impressed with a sense of the erroneous notions that were entertained by those who then interpreted the past and present. The connection of cause and effect between the past and the present was in former ages often assumed on inadequate grounds—assumed therefore where there was no such connection. Our industrial, our legislative, and our educational proceedings of the present day, show to what an extent our notions of the connection of cause and effect have changed for the better, great as the scope may be for further change also for the better.

Our experience of the present and the past has been long and varied enough to supply us with much information concerning what in former times went by the name of "knowledge of the future." If there ever was a time when men did not think of a future, there is no record of it in history. As far as can be ascertained, they have always anticipated, or assumed, or inferred, or expected, or relied upon some future. The future which they have relied upon has either been taken on trust, or has been derived from their acquaintance or supposed acquaintance with the past and present, a part of which has been their own doings, with the special design of bringing about a particular kind of future. With the progress of time it has been seen that, mixed up with many anticipations which have been realized, there were many which proved to have been mistaken. Among efforts which were intended to bring about particular kinds of future, it has been seen that many led away from the future aimed at, and many more were less efficient for their purpose than subsequent knowledge has shown they might have been. All this is essentially knowledge of the past and present,

whatever may be the light which it throws upon the future to be prognosticated. As the present, the connecting link between the past and future, has shown past prognostications to be true or false, correct or mistaken, it has afforded opportunities for considering how the true and correct were hit upon, and how the false and mistaken were fallen into, enabling us at the same time to avoid similar errors in future prognostications.

Before proceeding any further with our inquiry into what it is that we really know of the future, let us enumerate some of the conclusions to which we have been irresistibly led through the study of the present in connection with the past, shutting out as much as possible all thoughts of the future.

Our present state of existence in society is derived from the past through a long succession of generations; and has been rendered possible by the production and preservation in the past of large supplies of shelter, clothing and furniture, food and fuel.

The agency of man was indispensable for the production of these supplies, which have increased in

magnitude progressively as man has become more and more capable by increasing intelligence, industry, skill and economy.

Men in possession of these attainments have all entered upon life ignorant and incapable; and they became instructed and capable through the influence of some of the adults among whom they were born.

The larger part of men's thoughts and exertions has ever been directed to some future; whether that future was looked forward to as near or remote, certain or uncertain, probable or improbable.

With the progress of time, men have had opportunities for observing how far the occurrences of each successive day and year and century have corresponded or conflicted with their previous expectations; and they have found themselves confirmed in some of their expectations, and mistaken in others, but growing in capacity of correct prognostication.

Combined with this greater ability of foretelling the future, has also been a greater ability of bringing about one kind of future rather than another, and a clearer appreciation of the kind of future which it is desirable to bring about.

This knowledge of the present in connection with the past, from which the future so far as it has been overtaken by the present and past cannot be excluded, will help us in our attempts to ascertain what kind of future is destined to follow from our actual present.

CHAPTER V.

THE PRESENT AS LEADING TO THE FUTURE.

We have already observed that the only basis for our prognostications of the future is in the past and present. We have it recorded that some causes and forces have been at work from age to age as far back as history will carry us, producing and re-producing effects and results without change or variation, and mixed with them other causes and forces, apparently ever and anon shifting and altering, or growing and developing, and hence producing effects and results altogether different from any previously observed. The causes and forces acting through human beings are of the latter kind. It may be beyond our power to learn what effects and results will follow from them, but we may feel assured that they will not be mere repetitions of past effects or results. The path for us to take is, clearly, to examine and ascertain how

those causes or forces have shifted and altered, or grown and developed among us, so that we may prognosticate the altered effects or results of the future, themselves to be new causes or forces to be followed in their turn by other effects or results.

A survey of some of the causes or forces actually at work through human beings will prepare us to judge how far they have shifted or altered from causes or forces heretofore at work, and hence how far altered effects or results are to be looked for. Among these causes or forces may be cited:—

1. The wider range of man's knowledge and his greater aptitude in applying it, both in the production of wealth and in the use of wealth for the purpose of increasing well-being.

2. A more accurate appreciation of the method by which attainments in knowledge and skill may be imparted by one generation to its successors, with the character and disposition to induce that conduct in individuals which is likely to promote, or at all events, not to disturb the general well-being.

3. A deeper and more generally felt sense of the duty owed to infants and children by adults, not only

to provide them, till capable of earning for themselves, with adequate means of subsistence, but to give them that teaching and training which will lead to increase of wealth and enjoyment, and which will strengthen the desire to welcome and to master all new contributions to our old stock of knowledge and all improved combinations for turning knowledge to the best account.

4. The greater abundance and perfection of the contrivances and resources at man's disposal for communicating and recommending the discoveries and improved arrangements for increasing human comfort, as soon as brought to light by one individual or nation, to all other individuals and nations.

It will help us to assign their due weight to all these classes of new or increased causes or forces collectively, and also to guard against exaggeration, if we enter into a few particulars in regard to each of them separately.

1. *Wider Range of Knowledge and its Appliances.*

Of the increased capacity of the men of these days, both in knowledge and skill and in adminis-

trative arrangements, whether to produce wealth or to make it minister to their happiness, as compared with that of their ancestors, we may satisfy ourselves by noting the cessation of famines and the diminished severity and frequency of scarcity, and the means at hand and in preparation for maintaining abundance henceforward, and the machinery provided, wherever people are gathered together in large numbers, for supplying them with light and water and for carrying off impurities. No doubt or uncertainty about the truthfulness of this representation need be felt, because large sections of our own population and whole nations participate as yet but little in the increased well-being of which, if we are not mistaken, increased capacity must be the cause. Causes are not necessarily less certain because they are slow in producing the whole of the effects that will eventually follow from them. Many, indeed we might say, most of our machines and improved methods of production have, in the beginning, been viewed as pests rather than as blessings. Their introduction has been, not welcomed, but resisted. And although the disposition to obstruct industrial

improvement is less general than formerly, it is far from extinct. But even where the disposition to resist industrial improvement does not prevail, there may be incapacity to adopt it. And the removal of this incapacity will only be gradual, and may be a work for many generations. Our confidence, therefore, in the benefits sure to follow from industrial improvements, ought not to be shaken because their coming is gradual. Each successive addition to our industrial powers may be supposed to be the result of years of study and contrivance with a single individual, to have been taken up by a few, and to have been for a long time beyond the reach of many from their ignorance and inaptitude, besides being vehemently opposed by many more on account of their prejudices. The rapidity with which great improvements have spread in modern times, as shown in gas and water supply, in railways, locomotives, and steam-vessels, in telegraphy and photography, indicates diminished power in prejudice to obstruct improvements, and more general capacity to co-operate in carrying them out.

2. *Better Methods of imparting Attainments.*

That the method of treatment of children by their parents and guardians, and others in authority over them has been very different in different ages and in different countries, is known to everybody. Whether we elect to compare ancients and moderns, or the races least and most advanced in civilization, as they may be seen in various parts of the earth at the present time, we may equally observe examples of the two extremes of parental conduct—of mere animal affection for the young so long as the young stand in need of parental care; and of that sustained thoughtful solicitude which not only gives support to physical weakness, and endeavours to impart the knowledge and capacity for using it which would not come of themselves, and without which social life is impossible, but continues sympathy and solicitude to the very end of existence and to a later posterity.

Parental affection has gone through many phases, in its growth from mere animal instinct to the desire of arriving at some ideal of perfection in the method of teaching and training the young. The immense

height at which we find ourselves above the level of savages could not have been attained, if each generation had not exerted itself, whether consciously or unconsciously, and more wisely than unwisely, to impart its attainments, character, and spirit of improvement to its successors. Granted that much of what is practised under the guise of education, has been persevered in from one age to another without much reflection, that the end aimed at in dealing with the young has not been the best for the general well-being, and that the means adopted for the purpose have been ill-chosen; nevertheless, it cannot be denied, as a result of all the efforts in schools and colleges, and of the teaching and training continued in farms, factories, mines, counting-houses, ships, hospitals, and elsewhere, that knowledge and skill have been retained till superseded by knowledge and skill of a higher order, and that aspirations for improvement, and the readiness to work for it have been cultivated, or at least not suffered to die out.

The most casual inspection of the work now doing in the world ought to suffice to convince anybody of the necessity of much preparation to qualify all who

engage in it, and of the still greater preparation to qualify those who take a lead in it. Muscular force, disconnected with other qualifications, is less and less in request—less and less available to be worked up in combination with other industrial powers. The very tests and examinations, by which it is more and more attempted to secure a certain order of qualification for admission to office and employment, bear witness to the wide-spread conviction that measures must be taken to impart qualifications. It has happened, and it is difficult to conceive how it could have failed to happen, that while people have become more and more impressed with the conviction that special methods must be used to acquire and impart special aptitudes, they have learned that methods must also be used to acquire and impart general aptitude. Muscular power, and sustained effort and capacity of endurance can only be effectively used under the guidance of the superior knowledge and skill of others, when combined in those who possess them with attention to discipline, docility, sobriety, punctuality and integrity. The thought has taken, or at least is taking firm hold

of a large and increasing number of men, that these qualities will not flourish in adults, unless they be planted and cultivated in the young.

The importance of these qualities—the urgent need of repressing their opposites, has long been felt. The practice of striving to secure a prevalence of these qualities among grown-up men by cultivating them from childhood upwards is comparatively modern, and still calls for great extension. When we make this statement, we do not overlook the injunction of old, "train up a child in the way he shall go." But to enjoin is one thing—to have your injunction obeyed is another. To listen to an injunction, to repeat it, to promise to attend to it—all these are possible without even an attempt to make practice correspond with the injunction. Great efforts have been made to compensate for negligence, for want of attention and care in forming the desirable adult character through the judicious education of the young, by authoritative commands and prohibitions enforced by severe penalties on the adults who would not obey them. It was felt that society must be protected against murder, robbery, embezzlement and other offences, but the

means by which it was attempted to obtain this protection were those rather for resisting the criminally disposed, and for punishing criminals, than for guarding against criminality of disposition by teaching and training. Society is every day becoming more and more penetrated with the conviction that, while means must be provided for resisting and preventing crime, reliance for its diminution must principally be placed upon contrivances by which the whole of the young shall be brought to participate in the benefit of good education. The positive good qualities which it is now perceived education is capable of calling forth, with rare exceptions, in all the young brought within its influence, are also admitted to be the best preventives of criminality of disposition, and hence of crime.

3. *Stronger Sense in Adults of their Duty to Children.*

What the sense of duty is which gives a tone to the deportment and conduct of individuals and nations may be more safely inferred from the acts which they commit and refrain from, than from the words which they utter. If we see a nation advisedly abstaining from acts previously held to be

harmless or commendable, and performing acts which they would consider it disgraceful to leave undone as heretofore, we cannot doubt that it has undergone a great change in its sense of duty. Our own country will supply us with illustrations of such a change. Within this century, the slave-trade and slavery have been abolished; the punishment of death has ceased to be inflicted except upon murderers, and is not without reluctance inflicted upon them; the practice of duelling has died out; freedom of opinion is no longer interfered with, and the only restrictions imposed upon freedom of expression are what are indispensable for the peace and good order of society; and impressment for the navy is known only as an atrocity of the past. People are as sensible as ever of the desirableness of a large accumulation of wealth, of the prevalence of industry, skill, and intelligence to produce, and of economy to save it, and of laws and regulations to protect and encourage the producers, and to facilitate their labours; but they have abandoned prohibitions and restrictions, the purpose of which was to secure advantages in trade, at the expense of the other nations with which

we traded. The light has dawned upon the world that interchange between nations, as between individuals, is beneficial to all engaged, and not to the detriment of some while beneficial to others. Some misapprehension of the meaning of words might be suspected if it were asserted, in the presence of such facts, that the sense of duty pervading this nation had remained unaltered.

Turning from things done formerly and now discontinued, to things formerly left undone, but now attended to with steadily increasing zeal, we see savings-banks for small savings, cheap and safe means of transmitting small sums of money, or orders for money from one place to another; schools for every regiment in the army, and for every vessel of war, and the establishment of schools all over the country with the intention of placing education for children within the reach of parents and others entrusted with the care of children; not to mention reading-rooms, places of healthy amusement and recreation, and arrangements for the instruction of all who wish to pursue studies begun in school, or to make up for the want of school instruction. When

we see all this, it will be strange indeed if we do not see at the same time a nation undergoing a revolution in its sense of the duty owed by adults to children; of one generation to another; of the better informed and instructed, to the less informed and instructed.

Should anybody decline to accept these statements as evidence of the stronger sense of the duty to children felt by adults in these days, and challenge us to point out any time since the beginning of the Christian era when the duty of parents to children was not insisted upon, our answer must be that the insisting upon a duty and the performance of a duty are not one and the same thing. If it could be made out that people in former days insisted upon the parental duty as much as they do now, while they performed it less, it would be proved not only that they were less observant of the parental duty, but less scrupulous, less watchful not to aggravate omission of duty by incessant acknowledgments of the urgency of a duty which they had no intention of performing. A work is not the less left undone because acknowledgment is made that it ought to have been done. With such a confession, the cause

of the evil which ensues is not ignorance, but inhumanity. And we are not yet sufficiently scrupulous in acting up to our expressions of duty to be able to lose sight of this distinction. One can conceive thoughtlessness great enough to enable a man to deny that many children in our own times are shamefully neglected; but all who are not blind to the child-neglect around us must know that it has decreased from what it was formerly.

4. *Superior Means of Intercommunication.*

Whatever differences of opinion there may be on other matters, upon this all must be agreed:—That never, within the times of which records have been preserved to us, have the communications between the inhabitants of all parts of the earth been so rapid, so easy, so safe, and so frequent as they now are. There are few spots on the globe which are not readily accessible to anybody possessed of capital, or of an income, independent of business, who might be desirous to visit them, whether for purposes of commerce, of instruction or of pleasure. The application of steam and electricity to con-

trivances for the transport of men, merchandise, and letters, and for the transmission of news and orders, is altogether modern. And the improvements and extensions given to it from time to time, may justify our suspecting that we are far from having reached the limits at which men will be prevented from making intercommunication yet more frequent and easy. The man who should prognosticate, from what has been achieved, and from what is being attempted, that before the close of this century information from every quarter of the globe in less than a week, and from most places in less than a day, will be obtainable at the price of one penny, would not incur great risk of being classed among false prophets.

If the enumeration just attempted, incomplete as it is, be free from exaggeration, we may safely affirm that, besides the causes or forces uniformly in action now, as they were at the earliest periods known to us, there are others which have of late assumed such proportions, that we must either count them as new, or as multiples or expansions of former causes or forces on so large a scale as to be capable

of producing effects not to be looked for, except remotely, from any causes or forces heretofore in operation. It is evident that our success in prognosticating the probable future of the human race must depend greatly upon our ability to assign their probable effects to these new or intensified causes.

These causes of which we wish to estimate the effects cannot be said to be in action all over the earth, or to be equally intense in all the countries where they are in action. The countries where they are most intense and most actively at work are in Western Europe and North America. But it is unnecessary for us to go beyond our own country, which may be accepted as a fair sample of the more advanced countries, and the condition of whose inhabitants is best known to us. Let us, then, have a sketch, faithful though faint, of the present condition of society in Great Britain, the future of which we wish to prognosticate. A retrospect of the past, with the causes or forces within it which brought forth the present, will throw light upon the future which may be expected from the new or intensified causes acting in the present.

The present state of the inhabitants of Great Britain, compared with any former state, may be accurately, while briefly, described as follows:—

They are better fed, clothed and lodged, at the same time that they are more numerous. Famines, or the aggravated scarcities which occasionally afflicted our forefathers, have ceased. We are no longer troubled by rebellions and civil wars. Epidemics are less frequent and less virulent. Health is better sustained, disease more successfully guarded against, and more skilfully treated, and the average duration of life is greater. And the contrivances and arrangements for cleanliness, comfort, recreation, and amusement, have made these sources of improved existence more generally accessible.

If summoned to point out the causes which had been at work to produce this improved state of existence, we should cite, first and foremost, the increase of knowledge and its wider diffusion, which have led to the greater productiveness of labour, to the removal of all those restrictions upon industry and commerce which prevented increase of wealth, although intended to encourage it, and to a readier and

more cheerful obedience to prevailing laws; changes in them, when considered desirable, being sought for through discussion and persuasion, and not through violence and rebellion. Next, we would cite the improved habits and notions of enjoyment arising from a better acquaintance with the conditions of healthy existence, which has led to more general sobriety and to the regulation of present indulgence by a due regard to consequences. Lastly, we could not fail to cite the more earnest and practical recognition by adults of their duty, not only to feed, clothe, and shelter infants and children, but to teach and train them, so that they may grow up to participate in that knowledge and capacity for self-guidance from which, it is now perceived, we derive our present improved state of existence, and to which we must look for further improvement.

A very imperfect and misleading conception might be formed of our present state of existence if we were content to do no more than compare it with any former state, for we might well be thankful that we had fallen upon times much more favourable to enjoyment than the times of old. While thankful

for this state, improved as we know we inherited it from our fathers, we should endeavour to ascertain whether there be any thing in it susceptible of further improvement, whether there be reason for hope that the future will be as great an improvement upon the present as the present is seen to be on the past; or whether the future may be even a greater improvement than that.

We cannot shut our eyes to the fact that the elements of the improved existence for which we have to be grateful are sadly intermixed with evils which we would gladly get rid of. Some of those evils may be a portion of our inevitable destiny, while others may be remediable or preventible. We must fall back upon resignation as our only resource for alleviating the burden of the first. Anything short of effort never to be relaxed till the second are extirpated from among us, would be ignominious in the extreme.

A glance at the evils mixed up with our blessings will prepare us for judging which among them are traceable to causes under human control, and may therefore be removed, or need not be put up with as irremovable.

The daily records of passing events make known to us every now and then cases of death by starvation, and cases of suffering from want, so numerous that all the exertions of individuals acting separately or in organized societies seem to be incapable of affording the relief called for. These prominent cases are well known not to be the only exceptions in a population otherwise comfortably circumstanced. They are but the more pitiable and distressing samples of a numerous portion of our fellow-creatures, insufficiently lodged, clothed, and fed, damaged in health, doomed to premature decay and early death; some drunken and dissolute, and a prey to the most loathsome diseases, consequences of all kinds of vicious excess, and of the indulgence of ill-regulated passions.

Be it once more observed, if the causes which have given rise to this state of society were unalterable, this would necessarily be the future as well as the present of the human race. That they have been altered we learn from the records of the past. That they are still undergoing change is matter of daily observation. Our future, then, will be the

consequence of new causes not hitherto in operation, or, if it be thought a more accurate description, of causes which, although operative from the beginning, have become so accelerated or intensified in accordance with their very nature, as to be capable of producing in the end, new effects,—perhaps, effects hitherto supposed to be unattainable or visionary.

Very little attention will suffice to make us acquainted with the proximate causes of much of the suffering intermixed with the happiness enjoyed in the present state of society. Our store of wealth, that is, of the necessaries and comforts of life, is inadequate to satisfy the requirements—or what ought to be the requirements—of human beings elevated as much as they might be above the condition of mere brutes. Hence the numbers ill-fed, and ill-clothed, and the still larger number ill-lodged and ill-provided with the means of preserving health, and of obtaining innocent and improving recreation. Much of this insufficient store of wealth is wastefully consumed, and, what is worse, so consumed as to diminish rather than to increase the general well-being: witness the pre-

vailing drunkenness, and debauchery, and all the disorders and scandals consequent upon them. Many of those who are shut out from even a moderate supply of that wealth which they see prodigally consumed around them, strive to help themselves by fraud or violence. They resent the opposition made to their efforts. They are covetous of other's possessions, and reckless of danger in their attempts to help themselves, and to overcome the resistance offered to their attempts. Hence murderous assaults, burglaries, thefts, embezzlements, slanders, and defamations.

These proximate causes of present misery are less widely diffused and less virulent in their action than formerly; and present misery, deplorable though it be, is diminished in proportion. Viewing these proximate causes as themselves effects of other causes, and endeavouring to trace out what the causes immediately preceding were, it might be found difficult to point them all out to the general satisfaction, or to obtain a general acquiescence in any exposition of the results of such an investigation. But upon some of the remoter causes, there could be

no disagreement. If ignorance and unskilfulness in applying labour were greatly diminished, more wealth would be produced. If habits of wastefulness, dishonesty, unpunctuality, and intemperance were replaced by their opposites, not only would less wealth be unprofitably consumed, but more would be produced. If people could be more universally brought to understand and to feel that wealth may be more abundantly produced and more thoroughly enjoyed by the cultivation and practice of what may be summed up in one expression as the social virtues, breaches of the law would be less frequently attempted, and the services of a less numerous police force would be needful, and the disposition to aggressiveness, still far from extinct among nations, would give way, and in giving way, would yield up thousands of men, now organized for the purpose of committing and resisting depredations, to swell the ranks of those who are far too few to overmatch and prevent the misery which still afflicts most of us and disgraces those, if there be any, whom it does not afflict.

That our knowledge of the future can only be

derived from the past and present, becomes clearer and clearer the more we reflect upon it. Experience has enabled us to trace among past successions a very great variety of sequences, and it has also enabled us to confirm how well warranted we were in expecting and assuming that these sequences would be continued in the future. It has, besides, brought to our notice that we had overlooked many sequences since become plain to us, and had been mistaken in others. Owing to the oversight of the first, many events have occurred which we had been unable to prognosticate; and owing to our mistakes in the second, many which we had prognosticated have not occurred.

As we have advanced in our studies of the numerous chains of causation intertwined together, and connecting the past with the present, from the remotest past of which we have been able to obtain a glimmering, we have felt how small a portion of the whole, whether as regards its length or its thickness, is that which has come under our notice.

A million chains, with links of every variety of length, intertwined so as to form one huge cable or

cluster of chains, the links of some of the chains invisible to the naked eye, and, on account of their smallness, innumerable, and those of others so long that the part presented to our examination did not contain one entire link, would give some idea, however imperfect, of that portion of the whole chain of causation accessible to us.

Some little hesitation would be allowable in those who might be asked to undertake the work of prolonging that cluster of chains from either end. We seem to be shut out from the causes of our coal beds. We discover marks of an apparent glacial period succeeded by a tropical period, and then by a temperate; and of ocean beds and formations transferred to continents of great elevation. And can we affirm that there are not causes in operation which will retransfer them to the bottom of the ocean, or which will alter the inclination of the earth's axis to the plane of its orbit, or lead to changes, inevitable consequences of the causes actually at work, but irreconcilable with the causes alone known to man?

While reflections such as these cannot fail to give some colour to man's speculations on the future, they

do not damp, nor ought they to damp, his energies in preparing for the future, as prognosticable from the past and present known to him. If the earth were to become uninhabitable for the human race before the end of another year, the industrial efforts of the men engaged in preparing food and clothes destined not to be consumed, will do no harm, admitting that they end in no good; while the cessation of those efforts would leave man to perish, though the earth continue to be habitable as heretofore.

CHAPTER VI.

NEW OR INTENSIFIED CAUSES IN ACTION FOR THE IMPROVEMENT OF FUTURE GENERATIONS.

We are now face to face with most, if not all, of the causes of that portion of human misery which is removable. Four names will suffice to embrace them all:—Ignorance, unskilfulness, depravity of disposition, and bad habits, originating partly in ignorance and partly in depravity, meaning by depravity, a disposition to seek enjoyment regardless of the privation and suffering inflicted on others by the course taken in seeking it. The description which we have attempted of the present condition of the people of this country, general and bald as it may be, if not objected to as unfaithful or exaggerated, will suffice to keep before us an example of a present social state on which to try the probable

operation of the four classes of intensified causes now at work upon it.

Within less than half a century, larger additions have been made to man's knowledge of the powers of nature, and to his skill in using them for the production and distribution of wealth, than had been made in any previous five centuries. This knowledge has opened his eyes to the folly of imposing legislative shackles upon his own powers, while searching for and applying new powers external to himself. The discovery of new powers, the unshackling of restraints upon old ones, and the skilful use of old and new, have made an enormous addition to our store of wealth, besides improving its quality, as estimated by its efficacy in ministering to human wants and enjoyments. From the shortness of the time which has elapsed since these greatly increased powers have been at our command, and since prejudices and superstitions have ceased to deprive us of the free use of all our powers, old and new, it is plain that the increased wealth, thus far derived from them, must be but a small instalment of the greater wealth of which they are destined to be the precursors.

From the examination of this one class of intensified causes, we seem to be justified in prognosticating a largely increased store of wealth, and more wisdom and capacity in extracting enjoyment out of it, subject, of course, to the operation of other causes which may intervene to diminish this store, or to intercept the enjoyment derivable from it.

Less than a whole century, if more than a half, has elapsed since the thought of providing education of some kind for all children, supposing it to have existed, first found vent in practice. But the longer the time since the attempt was begun, the slower must it have been in advancing towards the accomplishment of its purpose; inasmuch as there are still large numbers of children for whom no education is provided, and larger numbers for whom that which is provided under the name of education is education in semblance rather than in substance. Nevertheless, the thought or, more properly, the conviction that infants and children will or will not be developed into intelligent, well-conducted adults according as they are well-educated, has sunk deep into the minds of men whose judgments are respected, and whose

advice and example are likely to be followed. The vague and unintelligible talk, misleading where not devoid of meaning, about the perversity, unteachableness, and intractability of human nature, the impossibility of bringing education home to all children, and the danger of unfitting them for labour if you could, is making way for the more accurate conception of child-nature which recognizes its adaptability to receive instruction, and to acquire the capacity for self-guidance indispensable for rational members of a rational community.

There is no disposition to deny that there are, and will continue to be, varieties of individual temperament and organization leading to great varieties of character and attainments. But the impression is not the less strong, great as these varieties may be in other respects, that all children, with rare exceptions, are capable, through proper treatment, of being formed into well-conducted adults, and capable, through neglect or improper treatment, of becoming exceedingly ill-conducted. Neither is there any disposition to underrate the importance of inquiries into the influence of race, climate, and soil upon the

characters of men; but it is seen that they can have no weight in determining the judgment to be formed upon the extension of education to all children, let the varieties of race, climate, and soil be what they may. And in our own country, where the differences are rather of family than of race, and of wealth and station rather than of climate and soil, differences in attainments and disposition are not expected to emanate from them so much as from differences of treatment —a wide term, but not embracing more than what education, properly understood, ought to deal with.

Let there be two communities, in one of which the prevailing tone in regard to children is little beyond that of animal instinct, while in the other it has assumed the form of a deep conviction that, according as skilful teaching and training are attended to or neglected, children will grow into happy and useful members of society, or miserable encumbrances and torments, it will scarcely be disputed that in the latter an intensified cause of good for the future, not to be found in the former, is in action. Our faith in the beneficial effects likely to follow from this intensified cause must be greatly

strengthened, if we gather from the records of the past that these two extremes of feeling, in regard to the treatment of children, have been characteristics of the same country, in the earlier and later periods of its development: the merely animal feeling progressively expanding into a thoughtful, intelligent appreciation of education as a means of transforming children into good and capable adults; health, comforts, habits, and manners steadily improving as the mere animal instinct expanded into an intelligent appreciation of the happiness-conferring powers of education.

It would be idle to talk of the duty owed by adults to children, to gift them with knowledge and skill, and with the disposition to look for enjoyment by using their knowledge and skill for the benefit of others as well as of themselves, unless adults were acquainted with the power which they are called upon to exert. But we are persuaded, and have said as much as is desirable here to show, that in this country many adults have become, and more are becoming, acquainted with the power which they possess over the future character and conduct of the children around them. Our next business must be

to ascertain what evidence can be obtained of the state of mind with which adults regard this power over the young which they are conscious of holding. The large number of children who still remain shut out even from the semblance of education alone provided in too many of our schools, and the larger number who are deprived of anything that can truthfully be called education, although they do find their way into schools, might be cited in proof that the sense of duty towards children, in regard to their education, is neither deeply nor generally felt among adults. On the other hand, it cannot be denied that the rapid growth of schools, the establishment of colleges for training teachers, and the appointment of school-inspectors under the authority of a department of State, all within this century, are striking proofs that the duty of adults to children as regards education, neglected or ill-performed as it may be, is less neglected than it used to be. Even they who would think it gross exaggeration and flattery to pretend that this generation of adults is adequately performing its duty to the young, will not deny that the duty is performed

less inadequately than it used to be. With this cautious form of expression—this scrupulous determination not to bestow that praise upon duties imperfectly performed, which ought to be reserved for duties perfectly performed, there is still the tacit recognition of a new or intensified cause at work, when duties less and less imperfectly performed, follow in succession upon the same duties more imperfectly performed or neglected altogether.

Greatly afflicted as society still is with destitution, vice, and crime, partly if not wholly the consequence of the former misapprehension and neglect of the duty owed to children, and sickening as is the spectacle daily before our eyes of numbers of children, uneducated and ill-educated, destined to afflict society in the future; we can scarcely be surprised if many refuse to acquiesce in the doctrine, that feelings of parental duty ought to be so extended as to embrace not only what is owing by all parents to their own children respectively, but what is owing by each generation of adults to the whole of its children. That the duty thus extended is not generally felt must be admitted. This conflict of opinion gives rise,

in appearance, to instability of judgment and vacillation of conduct, and might be thought to require some explanation.

With our conceptions of the duty owed by adults to children, there could be no doubt as to what our judgment would be upon a community inured to wide-spread child-neglect, or upon the merits of the individual or individuals in it who first pointed attention to the scandal, unveiled the horrors of which it must be the cause, and traced back many of the evils prevalent in society to it as their cause. Nevertheless, the first effect of these would-be enlighteners and reformers of society must be to disturb it, and to lead many to exclaim, "Whence this new light—why this stir, as if our forefathers had been content to abide in ignorance and sin?" There are men yet living who remember the first attempts to suppress the slave-trade, to emancipate our slaves, to secure humane treatment for idiots and lunatics, to deal with criminals so as best to protect society, and, if possible, to reform them, to discontinue impressment, and to make justice accessible to all.

The history of the agitation which preceded the

adoption of these reforms is the history of the growth of all truths from their first perception by one or a few individuals till they are universally accepted and acted upon. Each truth in science, and each new application of it in practice, have had to fight their way through every obstacle that prejudice and superstition, not unmixed with cunning and cruelty, could oppose to them.

While there has been much to deplore, there is also something to rejoice over in the history of the struggles and persecutions through which we have arrived at our present state of civilization. The dangers and difficulties which have been met and conquered, in order to establish each new acquisition of knowledge, are proofs of the intensity of the love of truth and knowledge which animates, in each generation, the few for whom is reserved the distinction of bringing new truths to light, and of prevailing upon the ignorant, the prejudiced, and the superstitious, to accept them. Does not experience warrant our affirming that the thirst for knowledge, and the desire to communicate it, are inherent in the human race, *i. e.*, in a sufficient number of

individuals, to secure its acquisition, preservation, and diffusion among the masses, and for all generations? In what respect is it less convincing than the experience which satisfies us of the existence of mechanical, chemical, electric, magnetic, and vital forces? If the zeal and vigour observable among us in calling forth, acquiring, and imparting knowledge, be not an intensified force acting in those who feel it, it is intensified as acting in our race, on account of the larger number of those who come under its influence, and of the diminished number of the ignorant, prejudiced, and superstitious, to oppose them, and of the mitigated forms now assumed by ignorance, prejudice, and superstition.

Vain as it would be to attempt to deny that the sense of the duty owed to children is far from being as active and as generally felt among adults as it ought to be, there are no grounds for denying that it is vastly more active and more generally felt than it ever was in former times. The obstacles, besides, which have prevented its faster growth and diffusion are seen, and seen also to be yielding before the influences daily becoming more powerful against

them. We may, therefore, safely retain "sense of the duty owed by adults to children" among the intensified forces now in action to influence the future of the human race.

Assuming the three first mentioned classes of forces, intensified in the present, as compared with former times, to be at work in producing our future; what that future will be, and how near, must, in some measure, depend upon other forces, if there be any, acting in conjunction with, or in opposition to them. And this brings us to the last of the four classes of intensified forces already mentioned.

A comparison of our modern schools with schools of the last century, places in a striking light, not only the improvement which has taken place in the appliances with which teachers are assisted in the performance of their duties, but the increased aptitude possessed by teachers in the use of appliances, and the altered feelings with which they contemplate the weakness, ignorance, and waywardness of the children whom they have to teach and train. If we survey the drawings, diagrams, maps, models, paper, slates, pencils, objects for lessons,

and seats and desks adapted to afford ease and comfort to the children; many of these articles were unknown in the best schools of the past, and all were less abundant and less suitable for their purposes. Some articles they had, such as canes, rods, and straps, which have disappeared from most schools. But the greatest contrast is between the teachers of the present and the past. The present look upon children as beings not indisposed, but rather desirous, to acquire knowledge and skill, to deserve approbation and marks of affection; and consider that the fault will be in the teachers and other adults, if children with these desires do not grow up to be intelligent, industrious, skilful, frugal, trustworthy, sober and orderly men and women. A modern teacher feels that none but an ignorant brute would strike a child, and that threats and angry words are as unnecessary, or as much opposed to effective teaching and training, as the blows by which they may be followed.

Outside the schools, the materials, the contrivances and arrangements for communicating and diffusing all the information possessed or likely to

be collected by a few, are beyond comparison with things of the kind in former days. The daily newspaper for the price of one penny, or the perusal of it gratis while taking one of his meals, places before every individual the latest information collected from all parts of the world by means of steam and electric power. It imparts to him the light elicited by the collision of intellect with intellect in discussing the questions and events of the day. One penny, also, thanks to the sagacity and energy of a man still living among us, will enable him to obtain through the post, from the most distant parts of the kingdom, information useful to himself, but to which the public is indifferent. Means similar to those which have made intercourse frequent and easy between individuals in the same country, have done as much between nation and nation. The facilities for communication, trade, and migration have brought nations into closer contact than heretofore. One consequence is, the more rapid diffusion of knowledge, and more ready adoption of improved methods of applying it. Nations the most advanced in knowledge and aptitude generally find that they can learn some-

thing from nations less advanced, and they are not slow to profit by the opportunity. While the least advanced, who have most to learn, and who stand in need of the assistance and example of others to enable them to conquer their indisposition to learn, are led to give the attention and make the exertion without which knowledge and skill are not to be acquired.

It must be confessed that the first consequences of intercourse between the more and the less advanced nations have not always been so beneficial to the latter as could be desired. Where they cannot be brought to understand and respect the usages and laws indispensable to sustain an improved state of existence, their obedience must be enforced. The collisions, which have seldom failed to occur between nations or tribes comparatively little advanced in civilization and the enterprising off-shoots from nations greatly in advance of them, have arisen partly from savage elements yet unextinguished in nations which have made the greatest advances in civilization up to our times. But the difficulties with which the most civilized men have to contend

in their intercourse with savages are so great, that surprise can scarcely be felt when we observe the civilization of savages to be of less frequent occurrence than their extinction. If the civilized man had only the children of savages to deal with, he might hope to train them into adults not utterly incapable of conforming to the usages of civilized life. Adult savages will most probably continue to baffle his efforts to induce them to submit to his rules, until he has succeeded in inducing the criminally disposed in civilized communities to abstain from criminal courses.

Where tribes or nations of different degrees of advancement are brought into contact, the course of future advancement may be altered, but will not be stopped by this contact. Fusion or amalgamation will take place, or submission of the inferior to the superior; or the extinction of the former, more or less violent, more or less rapid, but unavoidable, even where so peaceable or so slow as to attract little notice, unless warded off by previous fusion or submission.

If we examine attentively what is going on from

day to day, and from age to age, among the individuals of the more civilized nations, we shall perceive symptoms of movements towards fusion or extinction, not very different from those among tribes and nations. Individuals of various attainments or capacities slide into their several positions relatively to one another; the few to lead, the many to follow; the few to command, the many to obey; the few to direct, the many to serve or to be directed; and besides, some who have little or no capacity for any useful work in them, and others who, if not checked, would put a stop to all work. The capable and well-conducted in society have no alternative but to take upon themselves the care and the control of the others; and they do so, preserving as many of them as possible from destruction. One consolation is left to society, while it suffers from those of its members who sadden and worry it. The drunken, the riotous, and the fraudulent may be incorrigible, and it is only left to us to shut them out as nearly as we can from society; but it is possible to diminish the number of the like of them in future by more careful treatment of the young. It is not certain, in

the process of "extinction of species," that the criminally disposed may not be of those destined to be extinguished, or so reduced in number as to be easily provided for.

Not to lose sight of the subject more immediately before us, thus much we are bound to affirm. There does not appear to be any escape from the conclusion that, in our later facilities for intercommunication, we have, as compared with former times, an intensified force at work to make of the future something much more in advance of the present, than the present is in advance of the past.

In examining separately the four classes of intensified forces which seem to us to be at work in forming our future, we have endeavoured to guard against any misrepresentation. Our anxiety to keep well within bounds in describing these forces may have prevented our making the most of them; but we think we may safely say that we have steered clear of the greater danger of exaggerating past progress, of mis-stating facts and realities, and thus invalidating the consequences which might appear to follow from them. We have to estimate the results of these four

classes of forces when acting together; and any over-estimate, however slight in each, might lead to the expectation of a collective effect which could never be realized. We would not willingly form prognostications of the future less hopeful than an accurate estimate of the forces acting in the present will warrant; but if we are to err at all, we would rather do so by under-stating than by over-stating the forces, in the consequences of which we are so deeply interested.

The materials which we have collected, and the precautions for guarding against misrepresentations which we see the need of and intend to observe, ought to suffice to justify our attempting some prognostications of the future. It can no more be the counterpart of the present, than the present is of the past. The future may be worse or better than the present; the same it cannot be. And in order that no misapprehension may exist as to what we mean by these terms "worse" and "better," we will preface our attempt at prognostication by a brief description of the sense in which we use them.

That will be a better state of the human race in

which suffering from disease and pain and *ennui*, from superstitious fears, and from the sight of distress or misery, will form a smaller part of each individual's existence, be less acute, and be confined to a smaller proportion of the whole of each community. To bring this about there must be a larger store of wealth, and a more judicious consumption of it, and intelligence sufficient to distinguish real from imaginary causes of fear, with capacity to provide as far as possible against the first; the latter being innocuous as soon as understood. And these constituents of improved well-being cannot form the better state of the future unless they be preceded and accompanied by more knowledge, more industry, more skill, more economy, more sobriety, more honesty, and more of all the minor qualities which add grace and completeness to the others.

The opposite of all this is what we should call a worse state of the human race.

Be it remembered, that the forces, the consequences of which it is now incumbent upon us to estimate, are those only which act in and through man. They declare themselves in his disposition,

his intentions, and his acts. And they will be well or ill-directed by each individual, according to the corectness with which he appreciates what we have termed a better state of the human race, the state of general well-being to be striven for; and to the closeness with which, in all his thoughts, words, and deeds, he associates his own future well-being with that of mankind.

Our purpose would be served if nothing more were granted to us, in regard to the dispositions, intentions, and acts of men, than that it is desirable that, in each individual, these should be directed to the promotion of the general well-being; and that it is within the capabilities of education to cultivate in each individual a disposition to seek his own happiness in subordination to the general happiness, and to render him incapable of deriving enjoyment from any so-called pleasure incompatible with the general well-being; and that these great truths had at last been extricated out of chaos by a few individuals, let their number be ever so small.

If we were not mistaken in what we have already stated to be one of our readings of human nature,

when man has got hold of a truth hitherto hidden from him, he will cleave to it, and desire to expound and promulgate it. We re-affirm this reading of the nature of man. He may be driven by his fellow-men, blinded by superstition and prejudice, to conceal this desire, or to indulge it covertly and indirectly, instead of openly and directly. But sooner or later, truth will shine upon all, and conduct will be guided by its light.

In our times, these truths, although hidden from the masses—and by the masses we mean not only the uneducated, but the mis-educated—not only those who steer without lights, but those who unconsciously steer by false lights, are known and felt and cherished, not by a few, but by many; and they are spreading with a rapidity which insures, at no very distant period, their vivifying omnipresence. Their influence will be felt, first, by our more advanced communities, and successively by the less advanced and by every individual in them, till all nations will have become nations of men deserving to be called, what men have been called in advance of their deserts, "rational animals."

In enumerating the growing sense of duty of adults to children—improved education—education becoming what it ought to be, among the causes of human improvement, we almost fear that we may seem to assign to it a less prominent position than it deserves; for it may be said to be the parent of all the other causes. There is another fear which must not be dismissed as altogether idle. One might be suspected of greatly under-estimating the potency of the growing causes of improvement, still almost imperceptible, if not quite latent in the barbarous processes which the name of education is made to sanction, if no more than a passing thought were bestowed upon the consequences that must follow from just conceptions once formed of what education is, and is capable of effecting.

The small band, upon whom these conceptions first obtain a hold, dwells in the midst of teachers who despair of education as a power for raising mankind above its present state; and well these teachers may, for they confound their own notions of education with education as it ought to be, and may be, and is to be. We have seen what advancing

knowledge has done during the last half century in the industrial world, in spite of the resistance of those who lauded and clung to the inferior processes to which they had been apprenticed. A few of these, happily for themselves, were not incapable of learning and adopting better methods; but loss, suffering, ruin, and death were the agents which compelled most of them to make way for more capable successors. A process, the tendency of which is to lead to the adoption of received doctrines, whether true or false, and a process which encourages investigation in the hope of sifting the true from the false, so as to adopt the one and avoid the other, may both be called education. But an intelligent man is not to be misled or discouraged because an inferior process in operation goes by the same name as the superior process which he relies upon. The short-comings and the failure of education as it is may be matters of regret, but cannot be matters of surprise; they may confirm, but cannot shake his faith in education as it ought to be, which avoids mistakes previously overlooked, and adopts methods previously unthought of.

There is this, besides, to be noted about education rightly understood. Let its power for good be once conceived, its growth cannot be stopped, however much it may be retarded, till it has spread its benign influence over the whole human race.

CHAPTER VII.

OBSTACLES WHICH RETARD WHILE THEY CANNOT PREVENT IMPROVEMENT.

It will be quite in keeping with anticipations of a future most favourable as compared with the present or any former state of the human race, to be keenly alive to the opposing causes which must retard the advent of this better future, and make its approach gradual.

People of sanguine temperament have from time to time, in all ages, painted in warm and brilliant colours the future in store for mankind. Others, again, of a more gloomy mood, have persuaded themselves that our race is undergoing a gradual deterioration from the better state of a remote antiquity which they have termed the golden age. Inquirers of these latter days have been able, by

reflecting the light of the present back upon the past, to discover traces of former ages of ignorance, of bronze, of bone, and of flint; and in conjunction with those who are reflecting the light of the present forward upon the future, they have dispelled all fabulous illusions upon that subject, and left no room to doubt the progressive uprising of man out of the lowest state of mere animal existence towards one in which reason will be supreme.

But the sanguine people who, in former times, carried away by a kind of prophetic furor, and in disregard of opposing causes which they could not deny, and the means of removing or counteracting which they could not point out, proclaimed a golden future, were met by arguments which, even admitting them to have been satisfactorily answered, may still have weight with many. If we did not take special notice of these arguments, it might be supposed, either that we had overlooked them, or that we were conscious of our inability to meet them—one supposition as little creditable to our intelligence, as the other to our integrity. They have not been specially referred to so far, because we believe that

they have been taken into account under another form and duly appreciated. We have no wish to manufacture a system of our own out of materials of our own invention, regardless of incongruities and contradictions. Our aim is rather to become acquainted, through observation and reflection, with the system of which we ourselves are a part; and we can only hope to succeed in this by searching for, not by flying from, objections; by solving, not by ignoring difficulties.

The greatest of all the difficulties which used to be urged against the doctrine of the "perfectibility of human nature" might be, and perhaps in some quarters is considered to be, fatal to those anticipations of progress which we have formed. This difficulty is the tendency to be observed in every part of the earth for population so to increase as to be perpetually pressing upon the means of subsistence, whence destitution, disease, premature death, infanticide, and other evils modified in form by the superstitions and prejudices prevailing in different countries.

If the tendency of population to press upon the

means of subsistence be a correct expression for the cause or collective causes in which destitution, disease, premature death, and infanticide originate; and if this tendency is destined to be insuperable in the future, as it is asserted to have been in the past, and to continue to be in the present, we should feel compelled to admit that we had omitted in our calculations, however unintentionally, one element which would greatly modify the conclusions to which, if we have not yielded, we certainly were preparing to yield an unqualified assent.

But it appears to us that this "tendency of population to press upon the means of subsistence" is only another name for what we have already taken ample notice of. It has never come to our knowledge that large families are reared among the natives of Australia, or that mothers are more prolific there than elsewhere. The children die prematurely on account of the absence of an adequate provision for their sustenance; and they die in larger or smaller numbers, according to the seasons and other circumstances with which they come in contact. Where parents, although members of a community laying

claim to civilization, give birth to children for whose adequate sustenance provision has not been made, the same results follow. In our judgment the description is more accurate, and the expression more apposite, if we say that the children of ignorant, thoughtless, drunken, incapable and ill-conducted parents, will mostly die prematurely, and will, while they live, be badly supplied with the means of subsistence, than that population, however differently the parental duties may be thought of and performed, has a tendency to press upon the means of subsistence. They who consider themselves bound to persist in this description of what we admit to be some of the chief causes of human misery, or obstacles to human progress, may plead that they can see no reason for expecting that the weaknesses and vices above-mentioned will ever disappear, or be materially diminished. And if that plea be their justification, we are, of course, completely at issue with them.

The view of the present state of society which has impressed itself upon us as the true one, is that there are forces in action either new, or so intensified as to be capable of producing results that

never could have been expected from former forces, unless, indeed, those former forces be considered as the germs of the new or intensified forces coming into action. Among these new or intensified forces, is the conviction which has at last forced itself into the minds of men, that the dispositions, attainments, conduct, and well-being of each generation, depend greatly upon the treatment prepared for and bestowed upon it by the generation which preceded it. This conviction may be no more than passively acquiesced in by many; but there are others to whom to hold a conviction, and not to act upon it, would be an impossibility. By them it is felt to be a duty to teach the young what course of conduct in each will conduce to the well-being of all, and to train them to look for and to find their own well-being in following that course. One result of such a conviction, actively and widely felt, will be the performance as well as the recognition of the duties owed by adults to children —not merely to some, but to all children. A most obvious item in these duties is adequate preparation beforehand of shelter, clothing, and food for naked, helpless, and hungry children, and the continuance

of it till their age and strength, coupled with the attainments to which they have been helped, will enable them to perform their share of the duties of social life: their own self-maintenance being a part of it.

This view of the causes in action to produce our future is so encouraging, that any person to whom it is submitted for the first time might well fear lest his hopes should obscure his reasoning faculties, and lead him to accept the baseless though pleasant fabric of a dream, out of which he would have to awake painfully, in the place of a result of experience which, however unpalatable, he might hope to correct or to neutralize.

It is quite conceivable that a very intelligent and conscientious man should hesitate to believe in the probability of a consummation like unto that of a generation of adults impressed with and acting upon these convictions. But grant the consummation, and the fear that population will any longer press upon the means of subsistence may be discarded for ever. What is inconceivable is, how a man with any pretensions to intelligence and con-

scientiousness can refuse to admit that adults may, by continued attention to teaching and training worthy of the name of education, be brought to recognize their duties to children more generally than they do now, and to perform them more scrupulously, and that, as a consequence, population will, generation after generation, press less and less painfully upon the means of subsistence.

A few words will not be out of place here upon a practice connected with education which cannot be too strongly condemned. Not only are many children still shut out from the benefit of education, but to those who receive what is given under the name, the rules of conduct which lead to well-being are ill-explained, while no pains are taken in order that the intention to act systematically upon them, if expressed, should also be felt as well as expressed. And, as if to take precautions against the intrusion of anything so good as a habit of acting up to convictions deliberately assented to, the few accurately expressed and practicable rules of conduct which may be taught are so jumbled up with others ambiguously expressed and utterly impracticable, that the attempt

to distinguish one from the other is beyond most pupils' capacity. The attempt to act up to them all indiscriminately would consign the infatuated individual who might make it to confinement in a prison or lunatic asylum, or in some refuge for the destitute. Can it be doubted that this pernicious practice, which, if it do not exclude instruction in the duties of life from the course of education, deals with them so as to make them appear unintelligible, irreconcilable and impracticable, is destined ere long to make way for something better? Need even all of those now living despair of seeing the time when rules of conduct will be taught as faithfully and intelligently as rules of arithmetic? And when teachers attain even to that humble elevation, will not the prospect of a generation of adults capable and desirous of performing their duties by children appear less distant, and shall we have much cause for alarm lest population should continue for ever to press upon the means of subsistence?

The obstacles in the way of weaning a generation from a system of education which it has inherited from times when the range of knowledge, both of

human nature and of external nature, was much less extended than in our own times, and of obtaining its acquiescence, not to speak of its co-operation, in projects for supplying omissions, for correcting errors, and for introducing improvements, made possible by the general progress of society, are to be found in their greatest strength among teachers. These obstacles are, unquestionably, formidable; but they are not insuperable.

It can surprise nobody if the class of teachers, like all classes which are dependent for their improvement upon influences external to themselves, should, as a rule, be unequal to the demands made upon them. The teachers of our day, in the presence of parents and guardians of childhood clamouring to have important work better done than it has hitherto been done, resemble in some respects the hand-loom weavers and farm-labourers of old when their eyes first rested upon power-looms and threshing machines. Of all the answers possible to be given to a public dissatisfied at being shut out from something conceived to be attainable, but not pretending to know how it is to be attained, there is one which we may

be assured teachers will rarely give. They will seldom say: "The services required by you are quite reasonable, and they ought to be performed for you, but we are unable to perform them."

Even if some had the intelligence to perceive that they ought to give such an answer, or that, acknowledging the righteousness of the demand, they ought to set to work without delay to acquire the ability to satisfy it, we must be prepared to hear from others: "What you ask for is unattainable, and they who suggest these preposterous demands to you are ignorant visionaries who have never had the benefit of that intellectual discipline which instruction in the dead languages is alone capable of imparting." This at least will be the spirit, if not the phraseology of most answers. Few teachers will acknowledge themselves to be in fault, if they do not claim to be faultless.

The service required of teachers is their co-operation towards developing the young into well-informed, well-disposed, and well-conducted men and women. This service has been so long urgently called for, and the consequences to society of its

inadequate performance are so apparent, that another step has been taken in order to awaken teachers to the necessity of lifting themselves to the level of the service expected from them. The sins of omission and of commission noticeable in the system persisted in by them have been pointed out. And what do they still tell us—not in loud and exulting voices from the housetops, but in deprecating whispers? "You are asking for the unattainable. You think it possible to make perfect men. You overlook the perversity, the weakness, and the proneness to evil in human nature. You don't make allowance for the play of the passions. They will thwart you. You cannot destroy them."

After what has gone before, it is unnecessary to say that there is not one of these assertions which will stand examination. What we are asking for is not only attainable, but is being attained where attempted; the regret being that as yet it is attempted by a few only out of many teachers. We are not expecting to see men perfect; but we are expecting to see them, teachers included, less imperfect—much nearer perfection than they are. We do not

overlook the perversity, the weakness, or the proneness to evil, any more than we overlook the tractability, the fortitude, and the yearning for good in human nature. Our charge against teachers is that they fail to appreciate that the extent to which the excellencies and deficiencies of our nature will be manifest in adult life, greatly depends upon their treatment of children; and that this want of appreciation is accompanied by treatment, likely, however little intended, to suppress excellencies, and to encourage the deformities which they attribute, not to their own incapacity, but to the harshness of nature.

One of the new or better-directed forces from the action of which we expect that a better future is preparing for mankind, is certainly improved education. This force acts through man, and one method of accelerating its action is to bring to bear the influence of the more advanced upon the less advanced adults, so as to multiply the better agents acting upon the young. It is intelligible, though lamentable, that inferior agents, in their blindness, should decline to adopt the modifications and additions suggested as improvements; not considering

them to be improvements. But to complain that they who suggest changes, whether improvements or not, overlook the play of the passions, or arrogate to themselves the power of destroying the passions, sounds very much like the lamentation of one annoyed at being summoned to quit a beaten track long familiar to him, and to be at the pains of learning the landmarks of a new and better route.

The educator unprepared for the play of the passions, or expecting to destroy them, never existed. He can only be the creation of some distempered imagination. The height of any educator's ambition must be to bring the passions under the control of reason, not to destroy them. He strives to guard against gluttony, not to destroy appetite; to guard against drunkenness, not to destroy the feeling of thirst; to guard against idleness, not to destroy the desire of repose; to guard against the future want consequent upon prodigal consumption, not to destroy the longing for present enjoyment; and to guard against the bodily corruption, moral contamination, and social degradation consequent upon debauchery, not to destroy the passions from the gratification of

which, under the control of reason, we look for a large portion of our happiness, and the perpetuation and improvement of the race.

A man who is not exerting himself in these directions does not deserve to be called an educator. He who fancies that he has nothing more to learn in order the better to accomplish what he is aiming at, is disqualified by conceit from being a future educator. And he who sets himself against every change suggested to him, regardless whether it be an improvement or not, is a pervertor, not an educator, however much his position or title may imply the contrary.

However differently circumstanced in many respects, the inhabitants of the various regions of the earth may be, they are alike in one particular. There is not a single country known to us, of which the inhabitants are adequately lodged, clothed, and fed. In such countries as South Russia, Turkey, North and South America, Australia, and South Africa, where there is a perpetual longing for more labourers, and where immigrants are invited and welcomed, it would sound strange to talk of a super-

abundant population. Nevertheless, it may be asked, why there are so many ill-lodged, ill-clothed, and ill-fed people in those countries. And the answer is, not because population presses upon the means of subsistence, but because incapable people are so numerous there—partly through congenital infirmity, disease, and accidents, but much more through ignorance, drunkenness, profligacy, idleness, dishonesty, and disregard of law and order. Remove these causes of destitution in such countries, and it is plain that destitution would soon cease. Diminish them and destitution will be diminished. In like manner remove these causes of destitution in Western Europe, and would not destitution cease there also? These causes of destitution, as we have already shown, can only be removed, or kept at bay by education rightly understood; and that can only be adequately provided by parental solicitude.

The inhabitants of Western Europe enjoy advantages of which the inhabitants of other parts of the earth are not possessed. Conditions are attached to these advantages which do not apply where the same advantages are not enjoyed. A larger provision is

required from parents for the adequate education of their children and for their sustenance, till capable of providing for themselves. But this larger provision can be more easily made by them out of their larger means, than the smaller provision can be made by people less favourably circumstanced.

It is allowable for a writer who does not feel great confidence in his power of exposition to seek the asistance of an artist to illustrate his word-painting. Our purpose would be best served by having two pictures in which two artists treat the same subject—say some given state of society. The state of society fixed upon might be either that of one of the more barbarous people—the aborigines of Australia, or the Bushmen of South Africa, or that of one of the more civilized, whether in Western Europe, the United States, or the European colonies.

In both pictures we must expect to see represented numbers of human beings ill-lodged, ill-clothed, and ill-fed. The artist in one may do this, and do little besides. The other artist may fix your attention upon the causes of the destitution which, in the faithful exercise of his art, he is bound to repre-

sent. The features, lineaments, and carriage of the figures on the canvas will tell you of the stolid ignorance, the listless idleness, the reckless profligacy, the resistance to discipline, and, besides, the ill-treatment of children which, whatever other occult causes may be at work, would of itself account for nearly all, if not the whole of the human misery on the canvas.

Let there be an interpreter attached to each of the pictures, to whom it should serve as a text from which to draw advice for the present and prognostications of the future.

The first might say to those who were gathered around him, the picture of life here exhibited to you is not only what life is, and ever has been, but what it must for ever continue to be. Be resigned, therefore, to your lot. Cease to be restless and discontented, or ungrateful for the mixture of good vouchsafed to you in your pilgrimage. You would strive in vain to prevent the consequences which follow irresistibly from the continual pressure of population upon the means of subsistence.

Very different would be the comments and exhor-

tations of the second. Behold, he would say, the effects of ignorance, folly, and vice, and of the fountain-head whence these flow—parental neglect. But don't be down-hearted. A better future awaits your children and children's children, if you will but deserve it. And, by doing what depends upon you to bring it about, you will share by anticipation in the happier future which your posterity will owe to you. There can be no consolation, while suffering from the consequences of former ignorance, folly, and vice, to be compared with that which is to be found in efforts to stay similar consequences in the future, by averting the causes which, if not averted, will surely continue to produce them. Resignation in suffering, which it is beyond human capacity to avert, is a graceful accompaniment, but cannot be accepted as a substitute for untiring efforts to stave off avertible evils.

There is one more topic upon which a few words had better be bestowed in order to avoid misapprehension. A reader who has missed the general scope and purpose of this investigation, might say that no mention had been made of religion. An

element so powerful, rightly understood for good, otherwise for evil, he would feel could scarcely have been overlooked, and he might suspect that it had been purposely omitted. However well disposed he might be to adopt our conclusions on account of their apparent reasonableness, he could not but be anxious to inquire and to learn whether they might not be modified, when examined by a test to which they had not been subjected. We can assure him that religion has not been overlooked, and we will leave him, after he has duly weighed the explanations which we propose to submit to him, to judge how far it has been omitted.

We certainly have avoided to use the word "religion," a word which has been so misused as to appear at one time to mean something which sanctifies, and at another something which condemns doctrines and conduct destructive of human well-being. More often than otherwise it pronounces conduct opposed to human well-being to be grateful to God, and necessarily, therefore, not opposed to well-being. When we endeavoured to describe in precise language the dispositions and conduct which

must prevail if well-being is to be attained, and particularly the dispositions and conduct of adults in regard to the young, it appeared to us that we were doing our best to omit nothing which ought to be included in, and to admit nothing which ought to be excluded from, religion viewed as the declaration and sanctification of doctrines and rules of conduct specially designed to promote the well-being of mankind.

To introduce religion in a less guarded form would be to incur the danger of allowing superstition and immorality to slip in along with it. Religion as it is, and ever has been, in practice is so different from what it is conceived to be by those who accept it as the most powerful of agencies in the promotion of human well-being, that we have felt ourselves precluded from using the word. Most of the horrible acts of the past which are now clearly traceable to superstition, and are seen to have been consequences of misdirected passion, were reputed at the time to be sanctioned, if not to be ordered by religion. Even at the present day, while so many things desirable for the general well-being are left undone, and so

many things are done which are detrimental to well-being, by people exemplary for their (so-called) religion, these very people are contending that such omissions and commissions, bad as they may be, are to be followed by something much worse for evermore, to fall not upon themselves but upon the victims of their misconduct. For example, children who are neglected by the connivance of adults capable of protecting them, headed by a religious hierarchy, grow up into criminals, exposed accordingly to temporal and, as it is said, to eternal suffering; while they who might have prevented this suffering not only enjoy wealth and distinction on earth, but look forward with faith to everlasting enjoyment in a life to come. As regards the poverty-and-crime-stricken on earth, these same religious people, instead of devoting all their energies to bring about a better state of things, are sparing no efforts to silence and discredit those who would comfort the afflicted by leading them not to despair—by encouraging them to hope that their sufferings may come to an end.

In the midst of this confusion of thought and language, it appeared to us that we were exercising a

sound discretion in leaving the word "religion" aside. Our effort has been to extricate out of that mass of doctrines, at one time and in one place sanctioned, and at another time and in another place condemned, by so-called expounders of religion, those which recommend conduct favourable to well-being. The current of opinion is running in that direction. There is a growing tendency to make "religious doctrines and conduct" and "doctrines and conduct favourable to well-being" convertible terms. For the purpose of an investigation like that in which we are engaged, the latter term seemed the one to be preferred. To represent a doctrine or course of conduct as favourable to well-being seems to invite inquiry. To say that it is religious seems to imply that inquiry is at an end and judgment pronounced.

It may so happen that while we prefer the latter term, others will prefer the former. The conclusion need not be affected by the substitution of one term for another, although it may be made more difficult to arrive at the true one. The conceptions of the doctrines and conduct which deserve to be called

religious are clearer than they ever were before in the minds of the more advanced individuals and nations. The love of truth and the desire to promulgate it, which were always attributes of some portion of our race, have been strengthened progressively with the increase of intelligence. The means at our disposal for communicating and diffusing knowledge were never so powerful as they now are. And the consequence of all these intensified religious influences at work in the present must be the greater spread of religion properly understood in the future.

We are far from expecting that our method of conducting this inquiry will meet with general approbation. But we think we are entitled to ask of those who do not agree in the conclusion at which we have arrived to point out where we have erred. They should do more than blame or condemn us because we avoid using the word religion. They should bear in mind that the word may be used while no meaning, or an uncertain or mistaken meaning, is attached to it. We have intended to note all the influences for good which have been, and are, and will be working for the improvement of mankind, and

also all the influences for evil which have been, and are, and will be at work for the detriment of mankind; and we have stated the grounds on which we believe the good to be gaining upon the evil influences, and to be likely to continue to gain. Let the influences which we have omitted to notice, or mis-stated, or exaggerated on either side, be pointed out. We shall be grateful to anybody who will guard us from a wrong conclusion, even if he cannot lead us to the right one. We would gladly fall in with the use of the terms religion and superstition, if we did but know how to use them so as to make sure that the meanings of the two should always be distinguishable by those whom we addressed. We confess to not having this knowledge. The use of the terms is not forbidden to those who have it. We resign ourselves to the inconvenience of circumlocution rather than incur the risk of ambiguity. We collect together the influences for good under one head, and the influences for evil under another. All that the term religion represents ought to be included among the first. All that the term superstition represents ought to be included among the second. If

anything be omitted under either head it ought at once to be inserted.

The habit of trifling, or, it might be said, playing with language—of using words, if not unscrupulously, at all events, without a strict regard for their meaning, makes language a very untrustworthy indication of the conduct to be expected from it. Let any one judge for himself in this matter, by comparing the daily utterances with the daily performances of many persons in good repute. What a contrast between the religion of the lips and that of the hands! and between the two, what must be the religion of the sentiments and the volitions?

Few of those who have taken an active part in calling attention to misery, or in persuading others to co-operate with them in measures for its relief, will have failed to meet with some such ejaculations as "the sufferings of the poor are not so great as you seem to think—people get accustomed and hardened to suffering—the Lord tempers the wind to the shorn lamb!" Words like these can scarcely be intended to express what is universally known—that suffering will, after a time, be less poignant, the frame, mental

as well as bodily, becoming hardened or habituated to what seems to be accepted as incurable. They are meant to imply much more, and to reconcile those who are in the enjoyment of abundance and security, to the state of those who are ill-provided with present necessaries and comforts, and all but hopeless of the future.

Let language be rendered ever so hazy and ambiguous—let those who use it succeed for a time in deluding themselves and persuading others that there is no difference worth contending for in the lots of individuals, nations, and generations; the attempt to verify their doctrines will never fail to expose their absurdity and falsity. Whether we compare the poverty-stricken with the palatial districts of our large towns, the mansions of our gentry with the hovels of our peasantry, modern English life with that of the Britons and Celts of old, or of the Kaffir tribes of our own times, hesitation as to which of the two deserves our preference is impossible. If Kaffirs could not be induced to exchange modes of existence with their European neighbours, neither can they be persuaded to abstain from seizing some of the com-

forts and luxuries which they feel themselves to be as capable of enjoying as the Europeans who possess them. Our own poor countrymen would feel no Kaffir-like repugnance to dwell in wholesome houses, wear comfortable clothes, and consume abundance of nourishing food.

One state of existence is superior to another, whatever may be said or insinuated to the contrary; and among those who recognize the fact, a sufficient number are to be found, who cannot resist directing their intelligence and exertions to make the better state of existence prevail by the means so well known to them.

It would, perhaps, have been our safest course to avoid using the term "education" as well as the term "religion," each being made the cover for so much that is deleterious in practice. Not having done so, however, we will endeavour to guard against serious misconceptions by calling attention to one great obstacle to improvement which is actually raised up, cultivated and strengthened by a process which goes by the name of education.

In education, rightly understood, is to be found

our justification for prognosticating the progressive improvement of the human race. In education, as generally conducted, is to be found one of the chief obstacles which retard that improvement.

The object of education, rightly understood, is to impart to the young the capacity of good self-guidance—the essentials of which are knowledge of what ought to be done, and disposition to act upon that knowledge. Language, oral and written, is one of the instruments which must be employed in communicating and recording knowledge, and in giving expression to precepts and rules of conduct. The most obvious of all duties in using such an instrument is to make sure that the language expresses faithfully what it is intended to record and communicate. And it cannot be questioned that considerable time and attention must be set apart to perfect the young in the use of language as an instrument of accurate expression and of reasoning.

The process generally pursued in the name of education, presents a striking contrast in some respects with education rightly understood, as we have endeavoured to describe it. The knowledge

and the aptitude in acquiring and using it upon which we insist (and for the imparting of which language is but an instrument, although an instrument not to be dispensed with) are comparatively neglected; while language is treated rather as a chief than a subordinate, and mis-used accordingly. Familiarity with words and readiness in uttering them regardless of their meaning are thought of, not as disqualifications to be avoided, but as qualifications to be sought for.

The worst consequences of this mis-use of language are to be seen in the moral infirmities and deformities which it may be said either to engender or to quicken. The possession of knowledge, anxiety to acquire it, and as a preliminary, consciousness of the want of it, in which may be included the love of, and search for truth, are the mental states which we must wish to prevail throughout society; but we cannot understand how they are likely to be promoted by,—

1. The reading and repeating of sentences which express no well-defined meaning, or in which meaning is not even looked for, or if looked for is supposed

to be found in other words of which the meaning is as little known.

2. The pronouncing of precepts and rules of conduct which, if each were practicable separately, are collectively impracticable, and the contradictions in which are kept out of sight because the sentences pronounced are only thought of as words to be uttered, not as rules and precepts to be obeyed.

3. The excusing of the palpably untrue and contradictory to those who ask for precision or coherence, in matters so important as precepts and rules of conduct, by laxity of interpretation in attributing to the words and sentences sometimes one meaning, sometimes another, and by ringing the changes upon the literal, the figurative, the primitive, the derivative, the emblematical, the allegorical, the natural and the non-natural.

Persistence in such processes, in the name of education, is to use education as an instrument for retaining, not for banishing, ignorance, prejudice, and superstition. It explains, partly, at least, why destitution, vice, and crime, maintain their hold as they do. Greatly as we must deplore the effects

visible around us of such persistence in the past, resigned as we must be to the continuance for a time of evil consequences from present persistence in like processes, we must be blind not to perceive the better future for which the present is preparing. Among the many who persist in these vicious processes, misrepresented as education, are to be found a few who repudiate them, and who use education as an instrument for cultivating in the young the love of truth and knowledge, and the desire to preserve harmony between their words, their thoughts, and their conduct. And if we are not entirely mistaken in our reading of human nature, the superior moral culture resulting from the labours of these few will gradually overspread the land, expelling as it advances destitution and all that suffering which owes its existence to ignorance and bad habits.

The causes of much that is unsatisfactory in the present state of society are plain. The scope for improvement is undeniable. What the limits may be of the improvement possible to be accomplished, it would be premature to attempt to prognosticate; but

we may all strive to reach them in the full assurance that, while there are obstacles in abundance to whet our ingenuity, to try our patience and to nerve our courage, they can do no more than retard, they cannot prevent our progress.

We cannot resist the temptation to make a few additions to what we have just been writing upon education. That word may be used as a name for two very different processes. One to make the future a stereotyped copy of the past and present, to impart instruction so as to familiarise the young with what has hitherto been accepted as knowledge in our schools—a confused mixture though it be of the true and the false, the real and the fabulous, the useful and the frivolous—and to lead them to fall in with prevailing habits, manners, and desires, without questioning whether great changes for the better might not be made in them. The other, to make the future an improvement upon the past and present—to give to the young the full advantage of the vast acquirements made in the past and present; to assist them to see and comprehend how, during the heaping up of the stores of present knowledge, this

knowledge has been winnowed from the deceptions of prejudice and superstition, and how incumbent it is upon them, while studying to acquire the knowledge of the past and present, not to omit to investigate and master the evidence upon which they are invited to yield their assent, so as to guard against the intrusion of prejudice and superstition under the guise of knowledge, and to try and form their own character, not exclusively upon the models of the past and present with their weaknesses and vices, but upon that more perfect model which, as the offspring of past and present improvements, their growing intelligence will bring before them.

According as the apprehension of one or the other of these two processes is uppermost in the mind, under the term education, so will anticipations be formed of the further improvements of which education may be made the instrument. And according as adults direct their efforts in behalf of children by means of the better of these two types of education, will the improvement of the future be that of a future less remote.

CHAPTER VIII.

MEN'S CONDUCT AS A CAUSE OF THE FUTURE, AND KNOWLEDGE AND HABITS AS CAUSES OF CONDUCT.

It cannot be seriously disputed that the change for the better in our mode of living, as compared with that of our forefathers, has been brought about more by the greater extent of our knowledge than by any other cause. Much of the difference in modes of living among contemporary nations may also be traced to differences in the extent and direction of their knowledge.

Knowledge unapplied would, of course, produce but little effect. The smallest rise above barbarism implies that knowledge has advanced so far as to produce a general conviction that, if life at all might be preserved, certainly social life could not be preserved without labour. The comparison to be made,

therefore, is between labour without knowledge, and labour with knowledge; between labour with less, and labour with more knowledge. Not only do we know that social life could not be sustained without labour, and that labour, when assisted by knowledge, is rendered more efficient in sustaining social life; but knowledge also helps us to the means of inducing a disposition to labour, and to acquire knowledge wherewith to make labour productive.

If we would convince ourselves how indissolubly anything to which we give the name of knowledge is connected with some expectations of the future, we have but to attempt to separate them.

There is another turn which we may give to our expressions concerning the future, in order to meet the wishes of those fastidious people who contend that knowledge is too positive—too confident a term to apply to the future. Anxious to avoid a verbal controversy by asserting that anything future will happen, we might assert that, under certain conditions, the same thing will not happen. They who object to our affirming that the bread which we put into the cupboard will remain there till taken out,

cannot object to our affirming that it will not be found if not first placed there. In like manner, we might be permitted to make such declarations of our knowledge as the following:—The succession of day and night will not continue as heretofore, if the earth cease to rotate, or if it rotate with increased or diminished speed. A train will not arrive at its terminus if it do not start. No harvest will be reaped, where seed has not been sown. Houses and towns will not be lived in where they have not been built. Where a certain temperature is not sustained, the sugar-cane and the cotton plant will not thrive. Social well-being will not prevail where men do not work, nor learn, nor save, nor respect property.

To men who have had experience of states both of pleasure and pain, of enjoyment and suffering, and who cannot be divested of thoughts concerning the future, the distinction will not appear very obvious between knowledge of what will follow conditionally upon a given past and present, and knowledge of what will not follow, if that same past and present be eliminated. Although men's conduct will depend greatly upon their knowledge, it can hardly be

affected by the terms in which their knowledge is expressed. Their conduct will surely be the same whether we admit that they know the conditions which must precede future well-being, or refuse to admit more than that they know there will be no well-being, or that suffering will have to be endured, when those conditions are absent.

We do not see that anything is to be gained in clearness or precision by deviating from the language ordinarily used in speaking of our knowledge of the future. Our race has existed long enough to accumulate records of past prognostications of the future, some verified, and some shown to be mistaken by the events which have followed; of past efforts to bring about a particular future, some successful, and some unsuccessful; and of past efforts which have failed, followed by subsequent efforts which have brought about the future sought for. To what extent our knowledge of the future may be carried, nobody can be qualified to speak. We are aware that we know many things which were formerly unknown. And we are also aware that we do not know many things which were

formerly supposed to be known, although really unknown. Among future occurrences, we have made distinctions between the conditional and the unconditional, the improbable, the probable, and the certain; and as knowledge has advanced, matters classed as the known and the unknown, the conditional and the unconditional, the certain, the probable, and the improbable, have been shifted from one class to another. Some useful reflections may be suggested by an examination of the grounds on which these classifications have been made, and on which similar future occurrences have been transferred from one class to another.

There is no one classification of causes acting upon the future more useful than that which ranges them under the heads of causes irrespective of man, and causes acting through man. Among the former, we have the rotation of the earth producing alternation of light and darkness; and among the latter, the manufacture of lamps and candles to supply light during the hours of darkness. Among the former, are the obliquity of the earth's axis to the plane of its orbit, producing the succession of the seasons;

and among the latter, the manufacture of clothes and furniture, and the construction of dwellings to guard against suffering from cold, heat, and damp.

By studying the structure and composition of the globe on which he dwells, and the succession of phenomena and currents of events through many hundred years, man has been able to distinguish a vast number of them which have preserved a certain order of sequence. It being established that some events have occurred, he knows that certain others must have followed or will follow, and also that they must have been preceded by certain other events. He has been encouraged to persevere in his studies by the continual discovery of orders of sequence unknown to his progenitors, although the discovery brings to light at the same time, that the order of sequence last discovered prevailed in the past as it will prevail in the future.

As events have passed along in the current of time, an order of succession has been discovered among many of them, and from age to age among a greater number of them. This order has been called the order of nature; and the phenomena which occur

are said to be consequences of laws of nature. Man has conceived of this order of nature that it is permanent, and of these laws of nature that they are immutable. So much of the order and of the laws which are familiar now was unknown formerly that, where he cannot now trace order and law, he expects that he is at fault on account of his ignorance, and that the further researches, if not of himself, of his successors, will gradually bring forth additional proofs of the universality of order and law.

Man, besides being a student of cause and effect, of the order and of the laws of nature, is himself a cause, a portion of that order, a functionary under those laws — insignificant enough, if considered as one of the component parts of the universe, but highly important in regard to the influence which he may exercise over the well-being of his race.

When we read of men's doings in the past, and observe what they are doing in our own times, we cannot fail to be struck with the acts of folly, of recklessness, and, we might almost say, of madness, which are intermingled with their wiser acts. But there is one method of putting a stop to foolish,

reckless, and mad acts, which would be destructive of well-being; and that is, to stop all action. Man's action or labour is indispensable among the other causes of his well-being; labour guided by knowledge and invigorated with skill; labour severed from folly, recklessness, and madness, by all means. But labour, even if not always well guided, is better than no labour. What would our condition be if man had not tilled the ground, built houses, manufactured clothing and furniture, made roads and canals, constructed steam-engines, and other machinery, stretched miles of wire over the earth, and under the water, organized government, and maintained it in action for the protection of person and property? The mistakes and misapplications of power which have accompanied these works, frightful as many of them have been, will pass into oblivion. The works and their fruits will survive, and also the promise of future works and fruits to follow from them.

"To do," in fact, is a condition of existence to man in his collective or social capacity. He may do ill, or less well than he might; but he must either do

or perish. In his individual capacity, it would be better for his fellow-creatures or for society that he should not do, rather than that, by doing, he should counteract or disturb what others are doing for the general well-being. When a man's doings are of this kind he is said to do wrong, and society is at some pains to prevent him. Society accepts, as the smaller evil, the extra work of providing for him, and preventing his doings, rather than that of making good the waste or repairing the damage from his doings. Let the number of individuals of whom society has to take charge—whose doings it is compelled to prevent, be ever so great, "to do" still remains a condition of social existence. Experience has not satisfied men more thoroughly of anything than of this condition of their social existence.

The alternative which is presented to man, if he would continue to exist, is not "to do or not to do," but "to do well or to do better." He has learned somewhat of his position, and is progressively becoming better acquainted with it. He has accepted the alternative presented to him, and is endeavouring to

learn how to do better, and to pre-dispose himself to do whatever his better knowledge may recommend.

Among other matters which he has learned—partly by reflecting upon his own intellectual and moral growth from childhood, and upon the influences which were brought to bear upon him, and partly by observing the growth and treatment of other children—is, that the attainments and habits of all men depend greatly upon what is done for them, before they can have either the intelligence or the strength to take care of themselves.

What a difference there must be in the prospect of our race, after a truth such as this has forced itself upon mankind—after blindness to it has been replaced by a keen perception of it! How the prospect must be brightening as a conviction of this truth is growing in strength and spreading over a larger and larger number of individuals!

We can no more deny that the better appreciation of the conditions of our growth from infancy to old age has influenced, and is influencing conduct, so as to make it more capable of promoting well-being, than that the better appreciation of other truths has

done so. Our appreciation of any force, and of our ability so to direct it as to promote well-being, has always led to the use of it eventually. Where delays have occurred, the force has not been generally appreciated—prejudices have had to be overcome, the ignorant to be instructed, and the incurably prejudiced, to be replaced by the unprejudiced—operations requiring time, greater or less, according to the stage of general intelligence which has been reached. Everywhere around us we see results achieved by the application of discoveries made in chemistry and electricity since the beginning of this century.

Man's own conduct ranks so exceedingly high among the causes of his well-being, that too much attention can scarcely be paid to the means within our reach for securing the kind of conduct which will act in the direction desired. But his conduct, as we have seen, must be determined by his attainments and disposition; and we ought not, therefore, to turn away from the consideration of these till we have examined everything by which they can possibly be influenced.

We have already adverted sufficiently to the sense of parental duty as one of the intensified causes in action to produce a better future for the human race. But the capacity and dispositions of parents, or of adults in general, must be consequences, partly at least, of the treatment which they had experienced in childhood at the hands of their parents, or of adults in general. It is quite in keeping with this view of the conditions of progress, that each generation must be in advance of its predecessor. The parental duty of each successive generation being more efficiently performed, prepares those for whom this duty is performed, to be better learners and better doers in a world which has more to teach, and has better work and better deeds for the young to improve upon.

There is a prevailing feeling—one, as we believe, founded upon a correct interpretation of man's nature, and quite in accordance with the views which we have set forth—that every individual ought to consider himself, and must be held by others accountable for his own conduct. If his conduct be ill-advised in regard to himself merely, he is liable to

suffer in health, and comfort, and reputation. If it be so ill-advised as to affect the well-being of others, he incurs besides, and more or less according to prevailing intelligence and sense of right and wrong, the condemnation of society. His conduct may be judged sufficiently intolerable to subject him to legal penalty and restraint.

Individuals guilty of conduct hurtful to society would plead in vain that they had been neglected or ill-used in childhood. Such neglect or ill-treatment might adequately account for the adult misconduct condemned, but will not persuade society to relax measures necessary for protecting itself, whether by restraining or censuring offenders.

The disapprobation of evil conduct and of evil doers by society cannot be dispensed with. It is one of society's supplementary resources for securing protection against those who have grown up ill-disposed to seek enjoyment by means alone which do not endanger or disturb the general well-being.

The further we trace the consequences of parental negligence the more baneful does it appear, and the more hideous the sin of those who are guilty of it.

Bad parents resemble, in some respects, the secret abettors of assassination and receivers of stolen goods. The community suffers from causes set in motion by them, and the criminal through whom they act is made the sacrifice. In other respects, bad parents, and under that term we include society, so far as it tolerates child-neglect, differ from such abettors of crime, since the injuries caused by them originate mostly in ignorance, thoughtlessness, torpor and stolidity, rather than in active depravity. But exculpate and extenuate as we may, the injuries inflicted are not the less frightful.

If we do not misread the signs of the times, and miscalculate the accelerated rate at which the forces at work for the improved well-being of mankind are growing, these truths have obtained a sufficient hold upon the more advanced individuals in the more advanced countries of the earth to secure their gradual, and eventually their universal acceptance:—

1. Social well-being depends chiefly upon men's conduct. Irrespectively of conduct there can be no well-being.

2. Conduct favourable to well-being depends

upon knowledge and the disposition to make a good use of it. And these are only procurable through teaching and training.

3. Teaching and training, to be effective in imparting knowledge, and in forming good dispositions, must be begun in childhood—must, therefore, originate with adults, and must be provided for, since it cannot be provided by the children themselves.

4. Neglect of teaching and training, or child-neglect, is adult blame. It is torture protracted from childhood to old age. It is to treat children worse than criminals; for society has ceased to inflict torture upon them.

While it would be impossible to exaggerate the atrocity of child-neglect, we must not lose sight of the responsibility which awaits all adults, those who have been neglected, as well as those who have been cared for in childhood. They must conform to the laws and usages of society, and be capable of providing for themselves, or bear the consequences. Efforts to acquire knowledge and cultivate self-discipline must be continued by each individual after childhood for himself, or be commenced by himself if he have

been left by others to grow up to adult age untaught and untrained.

The obstacles to well-being which linger in the present and threaten for the future, from the child-neglect of the past, must continue to harass and afflict society for a time. Our encouragement and consolation under this affliction are, that every advance in knowledge, made by however small a number, is communicated to others, sheds its influence on conduct, and, as a part of that influence, increases the number of adults anxious to impart instruction and good habits to children; making them, at the same time, more capable of performing that duty.

It will be generally admitted that the present state of society, which contains the germs of the future, is not all that we could wish. We should be glad to see some diminution of the poverty, privation and suffering, in the midst of which we live. The pains taken by many of us to aid in this diminution imply that the task is not considered hopeless. But as the cause of future improved well-being must be improved conduct in the present, which has not had time to bear fruit, and progressively improving

conduct in the future, it is plain that if we could point out no indications of such improved and improving conduct, our expectations of good from the efforts now making would not be well grounded, and might be doomed to disappointment.

We could not point out indications of improved and improving conduct, if we were not aware of the past conduct which had undergone improvement, and of the present conduct which is an improvement upon the past, and susceptible of further improvement. In what respects, then, we may be asked, do we pronounce present conduct to be faulty and improvable; not the conduct of the few which is generally condemned as wrong, but the conduct of the many which is either held to be good or excused as indifferent or harmless?

We would rather fail in the attempt to answer this question than seek to evade it. But we think we have a satisfactory answer; and, with the aid of a few words of explanation, we hope to make this answer appear satisfactory to others.

One of the results of our progressively increasing knowledge and skill in applying knowledge is

progressively increasing wealth. Increased wealth has added greatly to the number of people with leisure, or of people who are relieved, wholly or partly, from the necessity of working for the means of subsistence, and who have time to spare, ability to spare, and wealth to spare.

One of the chief causes of poverty, privation and suffering is ignorance with its inseparable companions, in adult life, prejudice and ill-conduct. It may be necessary that many efforts should concur to banish or diminish this ignorance; but among them must be the teaching and training of the young. But child-neglect means absence or denial of teaching and training to the children who are neglected, which absence or denial carries with it, poverty, privation, and suffering.

It would be vain to deny that people of leisure, if so disposed, might do much towards banishing child-neglect and its frightful consequences from the land. It would be untrue to say that they are not doing more than they did in former days. It would be misrepresentation and flattery to pretend that they might not yet do much more. And it would be

unreasonable to be without hope or expectation of their doing more in future.

Our leisure classes live in spacious mansions elegantly and luxuriously furnished. Their gardens are kept in beautiful order. They fare sumptuously. They travel and sport. Their libraries and picture galleries, their equipages, horses, and hounds, their yachts and preserves, prove the efforts and expenditure of which they are capable in search of enjoyment. Efforts and expenditure such as these are considered by those who make them, and by lookers-on, not only excusable or harmless, but commendable, and the fruits of them not only delicious and enviable, but as reflecting something like lustre upon those who enjoy them. We are not disposed to utter a word in disparagement of their enjoyments. We will, however, suggest an addition to them:—the satisfaction that might be earned by the application of some of their leisure, wealth, and talents to the purpose of knowing that, while their enjoyment is disturbed by the spectacle of suffering unpreventable around them, future suffering from present child-neglect is effectually guarded against.

The future of society depends so greatly upon the conduct of adults to the young, that we will rather repeat ourselves than omit to trace any of the consequences which inevitably follow from this dependence, or leave anything unsaid that is likely to make it as clear to others as it is to ourselves.

One accompaniment of human progress, as we have seen it in the past and present and anticipate it for the future, is the incessant replacement of adult capacity by the feebleness of infancy to be developed into capacity, according to the pains and intelligence bestowed upon it. There is a set-off against this obstacle to rapidity of progress, in the replacement of adult incapacity and bad habits by adult capacity and good habits, if infancy be properly cared for.

It need scarcely be mentioned, that important consequences must follow from this uninterrupted succession of infancy to maturity, of ignorance and feebleness to knowledge and strength, in its bearing upon what we have seen to be indispensable to progress and improvement.

Of the numerous forces which must concur to

produce human well-being, we may, after what has gone before, now confine our attention to one—that is, to human conduct. The dependence of human well-being upon human conduct will be but half appreciated if we overlook the dependence of future human conduct upon past and present human conduct. And as human conduct is the result of knowledge and habits previously acquired, future human conduct must depend mainly upon the pains and intelligence employed in imparting knowledge and good habits to the young.

The examination of the causes or forces which have been successively in action to produce those states of well-being so far known to us in the past and present, has made plain why well-being in these parts of the earth has of late been making steady progress, and also why it is so vastly below what it will be in the future. Never before did there exist among mankind so thorough an appreciation of the dependence of the conduct of future generations upon adult attention to the knowledge and habits of the young, or so keen a sense of the duty owed by adults to children. The low state of well-

being or, more properly, the great extent of destitution and suffering which still prevails among us, is a convincing proof of the need of a further call for more activity and more intelligence in the performance of the duty owed by adults to children, by each generation to the one about to succeed it.

We have much to lament in the present aspect of society, but we have one consolation. The causes of misery which have their origin in human conduct being known, forces steadily increasing as this knowledge spreads, are, as a consequence from our very nature, at work to abate the misery. Whatever our doubts, therefore, may be in some respects, of the future of the human race, in one respect, there can be no doubt, it is destined to be an improvement upon the past and present.

Undeniable as these representations may appear to us, of the causes and consequences of human conduct, we cannot avoid being perpetually interrupted, while employed in making them, by counter-representations implying, if not expressing, that it is futile to attempt to trace cause and effect in human agency as we trace them in physical agency. The

whims and caprices and passions and wilfulness and acts of men, according to these objectors, will ever defy attempts to arrange them scientifically and to establish anything like a connection of cause and effect among them, and will prevent our doing more than indicate the tendencies, as regards future events dependent upon human conduct. Nevertheless, there are not many in the present day, however diffuse and erratic they may be in expatiating upon whims, caprices, passions, and wilfulness, who would choose to commit themselves to the affirmation that these antecedents of adult conduct cannot be acted upon by judicious training in childhood. It cannot be denied that the prevailing thoughts upon education are very cloudy, and the prevailing practice very discreditable, but we have arrived at the conviction that ignorance is removable by teaching, and that the passions (call them by as many names as we will) may be brought under the partial control, if not under the complete subjection of reason, by teaching and training in combination.

Cause and effect, irrespective of human conduct, are commonly treated of under the denomination of

physical science, and cause and effect in human conduct under the denomination of moral or social science. While the first are admitted to be firmly established by observation and experiment; with the second, it is held to be beyond our reach to do more than show what is *likely* to occur, rather than what *must* occur. To us it appears, as may be gathered from what we have already written, that this incredulity or want of faith in moral or social science is unreasonable, and that cause and effect are quite as obvious in human conduct, as in events which are independent of human conduct. In both, human intelligence is frequently at fault, and is obliged to put up with and act upon probabilities and tendencies, where certainty of sequence cannot be established. We have another suggestion to offer to those who hold to a contrary opinion. We invite them to point out for our benefit, if not for their own, any truths in physical science more clearly established than the two following (and two will suffice for our present purpose) taken out of social science:—

Well-being, as an effect, must be preceded by

intelligence, industry, trustworthiness, economy and sobriety, as causes.

These causes of well-being are also effects dependent upon causes, among which is adult care for the teaching and training of children.

Although the effect, "well-being," will not follow unless preceded by these causes, it cannot be affirmed that these causes will always be followed by the effect, "well-being." The co-operation of other causes, not under human control, is needful to make that effect inevitable. To omit mention of these co-operating causes, and to affirm that the causes named will be followed by the effect, "well-being," is to mis-state, not to state, a conclusion from social science. If it be permitted to draw from such mis-statement the inference that there is no certainty in social science, it must also be permitted to say that there is no certainty in physical science, when chemical or magnetic action is interrupted by the interposition of agencies unlooked for, or by the absence of agencies expected to be present.

There is one advantage in singling out human conduct from among the causes of well-being, and

adult care for childhood from among the causes of conduct, that this insulation, and the conspicuousness thereby obtained, make it less easy for those who are so disposed to give them the go-by—to pretend not to see them—to act as if there were no such truths, and, at the same time, maintain a character for goodness and piety.

There is not much difference of opinion now that, in Western Europe and America at all events, men have attained to a much higher state of well-being than was known to their ancestors. And they who have had the curiosity to inquire into the causes which have produced this improved state, are all but unanimous in admitting that the causes are to be found in man himself. If it be said that a large portion of the increased wealth and comfort at our command has been derived from powers external to man, never before brought into use, the remark cannot fail to follow that these powers are not new in the world; that they have always been as available for man as they now are; and that the only difference between the past and the present in regard to these powers is, that formerly man was incapable, and

now he is capable of appreciating and using them. There may be many of the powers external to himself which, even now, he is incapable of recognizing, or of appreciating and employing; but of the one inherent in himself—the capacity to acquire and apply knowledge—how little has yet been done, compared with what evidently might be done, to cultivate it and to make its cultivation co-extensive with the whole human race!

Shocked, as we well may be, at the gross neglect everywhere visible around us, of the cultivation of the desirable knowledge and habits in the rising generation, there is a melancholy satisfaction in being able to see in that very neglect, and the preparation to atone for it, the opening presented for the improvement so urgently called for, and the certainty that the causes are already in motion which must ultimately bring it about.

CHAPTER IX.

PRESENT LIMITS OF THE RANGE OF PROGNOSTICATION, AND HOW THEY MAY BE EXTENDED.

In the actual state of our knowledge, we might be excused for drawing back from anything either more definite or more practical, than what we have attempted in the preceding chapters. We have rather directed attention to the *data* on which all reasonable expectations concerning the future of the human race must be grounded, than ventured to make any positive predictions of our own. We regret for ourselves, as well as for our readers, that we are obliged to stop short of what many will have expected, and all will have wished—some nearer approach to an accurate exposition of coming events, such as astronomers and other proficients in physical science are in the habit of communicating to the public.

An absence of plain and intelligible speaking in

those who undertake to forecast the future would justify a suspicion, not only that their pretensions outrun their knowledge, but that they are striving to conceal, where they ought to confess, that the task is beyond human capacity, or that they are unequal to the task, supposing it not to be altogether above human capacity.

We have already admitted that all predictions concerning the future, to be trustworthy, must be based upon our knowledge of the past and present—upon observation, experiment, and reflection; and that man has much to learn before the future will be as plain to him as it is destined to be. He has learned enough, however, to entitle him to affirm that he knows some future things, and is ignorant of some, and doubtful about others. While in this state, it behoves him, if only for the sake of extending his knowledge and of assisting others to learn, not to confound these three classes of things. Particularly, he ought to express with precision those matters of which he claims to have a knowledge.

In our progress towards the knowledge which we possess, our presumed have been far more numerous

than our real acquisitions. We have had to distinguish the one from the other. Our false steps have been frequent, and we have had to retrace them. So incessant have been our mistakes, that we have found ourselves lacking faith even in our progress till it has been tested and confirmed.

Our advance in knowledge must be greatly impeded, and the time during which we may persist in a wrong direction must be greatly lengthened, if verification and correction are rendered difficult. And before verification or correction can be hoped for, an understanding must be obtained of that which it is wished to test, for the purpose of verification or correction, as it may happen.

As language, if not our only, is at all events our principal, means of communicating and recording what we believe to be our knowledge: precision in its use ought evidently to be considered indispensable. Ambiguity, slovenliness, and obscurity, must be avoided. In any statement, whether of past, present, or future, the matter first to be considered, in the order of importance, is its truth; but the first, in the order of time, is its meaning.

The announcements to be met with in two kinds of almanac for an ensuing year will illustrate the right and wrong use of language.

1. There will be an eclipse of the moon at a pre-appointed day and hour.

2. Portentous events will occur towards the autumn, the aspects of the planets being extremely ominous.

The language of the first challenges confirmation or refutation. That of the second makes either impossible—it is the language of ignorance or dishonesty, or of the two combined, and is attended to by the ignorant only.

It being conceded that precision in the use of language is a qualification, without which nobody who claims to be a prophet or prognosticator can deserve to be listened to, there will still be scope enough for the exercise of all our faculties, if we would learn to distinguish the credible from the incredible. The future events predicted may be the only events that can occur consistently with what we know of the past, or they may be irreconcilable with the past as we know it, or impenetrable to us as

we are placed in creation. We accept the first, reject the second, and disregard the last, or rather the presumptuous prophets who pretend to a knowledge unattainable by man.

Not only does man's increasing knowledge of the past and present help him to a more extended knowledge of the future; but his acts consequent upon his knowledge assume a more and more influential place among the causes past and present which produce his future. If the shifting elements which have to be estimated in forecasting the future, so complicate the problem as to make its solution hopeless, silence, or at least, abstinence from confident assertions ought to be self-imposed.

Complicated, however, as the problem may have become, it has happened with this as with many other problems, that the knowledge which has made us sensible of the complications has also made us more able to deal with them. Whatever may be the knowledge of the future which our race is destined to reach, and little as it may have learned up to this time; in its present state, we must acknowledge thus much: we do know something of the future; and

there is much concerning the future which we do not know. We also know that our present knowledge of the future is much more extended than it was in past times, and that it is free from many superstitions and prejudices mistaken for knowledge, so long as they prevail. Our progress in acquiring knowledge is accordingly less likely to be impeded henceforward by superstition and prejudice, which, in the disguise of knowledge, actually hide our ignorance from us.

There is another feature in our advancing knowledge which deserves to be noticed. Progressively with its increase, the knowledge of society, or of men collectively, has become large in proportion to that of each man individually. In barbarous states of society, the individuals who compose it are more nearly on a level in regard to the little knowledge which constitutes their common stock. As the stock increases, it becomes impossible that each individual should master the whole of it. To preserve and increase the stock, it must be distributed into departments, none to be left uncultivated, and yet each individual to be safe in passing over many of

them, confident that he will have the benefit of the knowledge cultivated and applied by others.

Having arrived at a stage of knowledge in which it has become necessary for each individual to leave some departments uncultivated, and to trust to others to give him the benefit of their cultivation of those departments, it is plain that there is one item of knowledge of which, as nearly as possible, every individual ought to be the possessor. He ought to know how to distinguish the trustworthy from the untrustworthy, among those who profess to have and to be capable of applying the knowledge in which he is deficient. A few examples taken at random from the daily business of life will illustrate the importance of this item of knowledge. They will also enable us more readily to understand how each individual is assisted in making himself master of it, and in guiding his conduct by it.

The tillage of the land is indispensable for our very existence, and the application of all the knowledge and skill attainable to its tillage is seen to be one important means of promoting the general well-being. Nevertheless, a very small proportion of

the whole community are farmers, or are possessed of the knowledge and skill which would enable them to farm the land; and the mass of the community, knowing little about farming, are deeply concerned that the land should be farmed by those who are most capable of drawing from it the largest crops of the produce most in demand. To do this, farmers must be capable not only of predicting somewhat of the future, but of knowing what they must do towards bringing about the future which they both desire and predict.

The men who can thus predict, and do the needful towards procuring the fulfilment of their predictions, are they who can afford to pay the highest rents for their farms, and to sell their produce at the lowest prices. These are also the men whom landlords and the community encourage; for landlords are disposed to prefer tenants who offer the highest rents, and the community to buy of those who offer commodities of the best quality at the lowest prices. Less capable men could not manage to pay such high rents, and at the same time to sell their produce at such low prices. Hence they are compelled to stand

aside and leave the cultivation of the land to the more capable.

Thus indirectly, the mass of the community, comparatively ignorant of farming, are secure of enjoying the fruits of that knowledge of which they are not possessed. One condition, however, is attached to this security, which must be complied with by all who would not be disappointed: they must be possessed of some equivalent wherewith to purchase the fruits of other people's knowledge and skill.

Naval architecture is another department of knowledge of which a still larger proportion of every community is wholly ignorant. The naval architect predicts the stability, durability, capacity, and speed, of the vessels which he is designing; and knows how to contribute to the fulfilment of his own predictions. The public appreciates results, although it may not be able to judge of the means by which they are accomplished; and it purchases the ships in which are combined in the greatest perfection the qualities desired. But the naval architect relies upon the sale of his ships for his means of subsistence, for the

food, clothing, and shelter, and other necessaries and comforts, without which he and his family would not have a fair share of the enjoyments of civilized life. And he could not procure these if the price obtained for his ships did not exceed the cost at which he built them. He is thus, as it were, bound over in penalties to offer to the public the fruits of at least as much proficiency as others engaged in the same department of industry. And in proportion as he offers more, so will the public give him additional encouragement in return.

After the ship has been built and equipped, she is given into the charge of a captain to be navigated. He has to bring to bear his knowledge of the future and his capacity for doing that which will procure the fulfilment of the future desired by himself and others. Special pains are taken by the public, or by officials on its behalf, to ascertain whether he be possessed of the attainments and character which alone would justify his being trusted with the lives of passengers and crew, and with property of great value. His attainments and character are investigated beforehand. And a judicial inquiry follows

upon any serious mishap, to determine whether it occurred through any default of conduct or knowledge in himself or any of his officers.

The more difficult of attainment the special qualifications required for any profession, the greater are the pains taken to guard against the want of them. We would not affirm that the means chosen to ascertain and secure the qualifications are the best adapted for the purpose. Far from it. We recognise, however, the desire to give the public the opportunity of selecting out of a class, from which utter incompetency is meant to be excluded, the individuals best qualified to render the services required of them. Men of a certain standard of qualification are alone permitted to practise as surgeons and physicians; and after they have obtained their diplomas, they still have to inspire the public with a sense of their sagacity in predicting the future and in doing that which is most likely to procure the fulfilment of the future wished for. They are liable, besides, to be visited with penalties for grave cases of neglect or incapacity.

With such examples as these of what is of daily

occurrence, there is no denying that almost all persons, the instructed and uninstructed, each according to their lights, are eager to obtain a knowledge of coming events, and are conscious that coming events depend partly at least upon their own present conduct. It is curious to contrast this all but universal feeling with the *dictum* which represents the future as unknown and undiscoverable.

We may be allowed, after what has gone before, to dismiss this *dictum* as one of the utterances which some people have acquired the vile habit of making, without even a thought of attaching a meaning to them, or of allowing their conduct to be influenced thereby; and to pass on to the inquiry, one really of great interest, whether we can distinguish among predictions, the true from the false, and the warranted from the unwarranted, and how we are to do so, if the distinction can be made.

As to the distinction between the true and the false, every day's proceedings seem to assume the possibility, and to recognize the method of drawing it. One of the duties of a district surveyor is to condemn certain buildings and to sanction others.

The preliminary to either decision with him is to judge that the first are dangerous, and the second secure; in other words, that the first would fall if their erection as proposed were to be permitted, while the second would stand for the term and uses intended. A sanitary inspector reports the drainage and ventilation of certain districts as insufficient, and his report is based upon the conviction felt by him that if they be permitted to remain unaltered, the death rate will be greater than it need be. The medical adviser of a life-insurance company refuses to recommend the company to insure certain lives, except at an extra premium, because he prognosticates that such lives cannot be prolonged to the average length expected to be attained by other lives selected and recommended by him. A good parent adopts a certain method of treatment with his children,—mingles precautions and restrictions, mostly unseen by them, with apparent freedom of action within the limit of their strength, because he prognosticates that, if these measures were not taken, his children would grow up to the enjoyment of less happiness than he expects to be in store for them, with the aid of what

he is doing, and be less capable of contributing to the happiness of others.

If these individuals were brought together and questioned as to the grounds of their judgment and conduct, one answer common to them all might be expected. Their experience had satisfied them that the future would be determined, partly at least, by their decision and by the conduct based upon it; and that the line of conduct adopted by them was more likely to lead to a desirable future than any other within the range of their knowledge. They may be presumed to be appointed, or to be permitted to exercise these functions, because their knowledge is believed to qualify them pre-eminently to guide the decisions and conduct of others. They ought, however, to be alive to the possibility that further observation, experiment, and reflection may reveal other conclusions and recommend decisions and methods superior to those adopted, although the prior decisions and methods may have been the best within reach up to that time.

It will be borne in mind that, in matters bearing immediately upon human life and happiness, we are

shut out from affording all that support to observation and reflection which might be obtained from experiment. We have opportunities however, in abundance, of learning from the sad consequences of mistaken conduct, as well as of obtaining confirmation of the happy results prognosticated from new applications of the suggestions of knowledge. Men will go down in foul wells and cesspools without first expelling or neutralizing noxious gases, and will expose their unprotected lamps in mines abounding in explosive gas, and will leave ships and lofty buildings unprovided with lightning-conductors. The occasional fatal consequences of such ignorance or rashness are aids to observation and reflection, as much as if the experiments had been made purposely to test the truth of favourable or unfavourable consequences, according to the line of conduct chosen.

Great reluctance is felt by many to be, as they conceive, tied down to the observation and study of the past and present as their only means of foretelling the future. Truly, they ought not to submit to any restriction likely to diminish their opportunities of learning. But to be shut off by our own experience,

or by the guidance of others, from paths which lead astray—to be confined to the one safe path, is to be hastened forward to, not to be kept back from, the journey's end.

Even if there be other means of ascertaining the future, this must be admitted in favour of observing and studying the past and present. Progressively as our knowledge of the past and present has increased, so also has our capacity of predicting the future been increased. And progressively as our skill in applying knowledge has been increased, so has our power increased of shaping the future according to our own wishes. One great, if not the greatest, inducement to persevere in our efforts to acquire knowledge and skill is the increased command which we obtain over our future. We learn more of the inevitable future to which we have to accommodate ourselves, and more of the controllable future which we may shape to our own convenience.

We expect, of course, to be told by many people that they can derive little assistance from anything that we have proffered towards clearing up the darkness in which the future is involved. If they com-

plain that we leave them as ignorant as they were concerning the weather, the crops, the prices, and the political convulsions of the future; we not only admit that we are as ignorant as they are upon these matters, and therefore incapable of instructing others, but we see difficulties in the way of attaining to a precise knowledge of these and similar matters, which we are not very hopeful of being able to overcome. There have been merchants who, to their cost, have made sure of future prices, and statesmen who have made sure of the future dispositions of nations and sovereigns, as well as politicians who have undertaken to recast the map of the world agreeably to the re-distribution of countries sure to be made a few years hence. We are not inclined to pay more attention to them, than to the prophets who fix a date for the destruction of the earth.

Unless prophecies of this kind can be shown to be incompatible with what we know of the past and present, or until they have been contradicted by the events, we would not pronounce them to be false. We should do no more than disregard them as unwarranted. Prophecies which are irreconcilable

with observation, experiment, and reflection we reject; those which are simply not deducible from them we disregard. We smile at the audacity of him who tells us, of any future winter, that it will be more than usually severe, or of any future summer, that it will be more than usually hot. We abominate the mendacity or pity the credulity of him who tells us that on some future day the sun will remain at the meridian for twenty-four hours consecutively. The beginning and the end of all things have been subjects for speculation from time immemorial. Both have hitherto proved impenetrable, great as the assistance has been which we have derived from the knowledge acquired by observation, experiment, and reflection.

The fables which have always preceded knowledge have been received as though they were based upon knowledge; but as knowledge has advanced, fables have been discredited, some as contradicting, some as defying knowledge. Geology and astronomy have superseded the fables heretofore received as satisfactory expositions of the beginning of all things; and the study of the phenomena of life

and of the nature of good and evil, and right and wrong, have unseated the fables which have been supposed to foreshadow, if not the end of all things, the conditions of posthumous existence.

Mortified as we may be by our consciousness of the limits within which our capacity for predicting is confined, we are comforted by a sense of the great extent of knowledge which we have acquired, and of the greater extent perceived to be accessible through perseverance in observing and studying the past and present. We may regret our inability to predict the political geography of the future, but we can rejoice in our ability to predict a diminution of want and suffering, and an increase of intelligence and well-being, for the whole human race. We are comforted, in our ignorance of the future forms and arrangements under which the human race will be distributed, by our knowledge of the better destiny in store for it.

Not only has our ability to predict the occurrences of the future been steadily increased with every increase in our knowledge of the past and present, but we have been made sensible of the

many mistakes into which we had been led by unconsciously reckoning upon a future, for which we had no warrant in the past and present. The exertion, the self-denial, the risk of life, and the endurance of pain to avert one future, or to secure another, are everyday occurrences. Where the future good sought for suffices to outweigh these sacrifices, we approve of the individuals who make them as wise and virtuous, and sometimes as heroic. But the pages of history and the daily events of life show that these sacrifices are often made under mistaken impressions as to what the future will be or can be, and as to the means by which the future may be influenced.

Men have been at all times, and still are, so liable to err in reading the past and present, and, as a consequence, in prognosticating the future, that full reliance can scarcely be placed on any future predicted, till time and opportunity have been afforded for verifying similar predictions. As we look back we are able to distinguish three classes of past predictions:—1, the true, or those with which the actual future has since corresponded; 2, the false, or those with which the actual future has been irrecon-

cilable; and 3, the unwarranted, or those which have hitherto been beyond the reach of verification.

We have yet a few words to say upon the last of these three classes, or the unwarranted predictions.

Man's anxiety to increase his knowledge in all directions has brought him acquainted with many events which must have occurred long antecedent even to the existence of his own race as known to him: witness the discoveries of astronomers and geologists. And the projection of this knowledge forward upon the future enables him to predict the far distant future. His investigations into the distant future have been thus far successful, because he has set himself assiduously and carefully to trace an order of sequence in the remote past by the light obtained from that which he and his predecessors have established in the proximate past.

The knowledge of the distant, either in the past or the future, to which man can now lay claim, varies greatly, in many respects, from that of which in bygone days he fancied himself to be the possessor. Compare the fabulous accounts of the origin of the earth and the heavens, with the well-established dis-

coveries of astronomers and geologists! Is it not by their discoveries that we are enabled to direct our course across the ocean, and to judge beforehand where we shall find the coals and minerals buried in the earth? Was it not a consequence of our ignorance that the signs in the heavens inspired fear, rather than confidence, or led into rather than away from danger? Was not ignorance the cause also of a vain expenditure of labour to get what was not to be found where it was looked for, while much less labour would have brought it forth where it was not looked for?

There are many cases of unwarranted predictions which have not yet been tested by verification, and of which it may be said that nobody can explain how they ever are to be so tested. The prophets who have foretold the destruction of the earth on days since passed, have had their prophecies brought to the test of verification which they have been unable to stand. Pretenders who make prophecies, equally unsanctioned by knowledge of the past and present, of the earth's destruction on some day not yet arrived, deservedly find few to listen to them. The less in-

cautious prophets of this school defer the earth's destruction to some far distant or indefinite day, and thereby escape the exposure consequent upon a disagreement between the real events and the events prophesied. Prophets who describe to us the state of posthumous existence which is in reserve for all human beings, escape the test of verification. From the remotest periods of history, men have looked forward to a life beyond the grave. The infernal regions of the heathens were deep-seated below the surface of the earth. The heavens, where the gods resided, and to which certain chosen men were elevated after death, were seated far above the earth. Charon with his boat, the river Styx, the Elysian fields, gods and demi-gods, are only talked of now as fables. If studied at all, they are only studied as portions of "mythology." The mythological posthumous existence, and the mythological places where it was to be enjoyed or suffered were greatly disturbed, if not uprooted, by the discovery that the earth was a spheroid floating in space, rotating on its axis and journeying round the sun.

There is a large portion of the human race which

believes that after death the soul of each individual is transferred into the bodies, first of one and successively of other animals, according to his character and conduct during life, and is ultimately, when purified from all traces of his follies and vices, united to the great spirit.

We need do no more than refer, without note or comment, to the varied character of the anticipations of a posthumous state of existence current in the Christian world. The expectation of a posthumous state of existence has prevailed long and widely, and still prevails. If it has not been verified, and cannot be verified, neither can it be shown to be incompatible with past or present facts.

When the general enunciation of a belief in a state of posthumous existence is followed up by particular descriptions of that state, and of the conditions on which it is to be enjoyed or suffered, opportunities are presented for comparing those descriptions with others, ascertaining their mutual coherence and showing how far they are consistent collectively with our other knowledge. Granting a state of posthumous existence, it is clear that

a state of perfect happiness for all is inconsistent with a state in which some will enjoy and others suffer, that if rewards and punishments are to be allotted according to conduct on earth, punishment cannot be both eternal and temporary, and that posthumous life cannot be both life in the body and life out of the body. These various modes of posthumous existence cannot all be true, unless they be assigned to different individuals and nations—a method of reducing contradictory states of posthumous existence to harmony which has not been suggested.

One resource is open to those who would not be shut out from the comforting assurance of eternal bliss. They may search for and believe in a state of posthumous existence which, although not deducible from our knowledge of the past and present, and beyond the reach of verification, is not impossible. No description, however, of a state of posthumous existence can be acceptable to thoughtful men unless it accord with the attributes of the power by which it is assumed to have been pre-ordained. If that power be infinite, and directed by infinite goodness

and wisdom, a state of posthumous existence can only be a state of happiness.

But let the state of posthumous existence in store for man be what it may, there is comfort in the assurance that his future earthly state is destined to be one of progressively increasing happiness. To co-operate in hastening on this improved future state of existence, especially by caring for the proper teaching and training of the young, ought to be felt as a duty by all; and they who perform this duty will enjoy a foretaste of the greater happiness which they are preparing for future generations. At all events, they need be under no apprehension lest their chances of everlasting blessedness should be diminished by earnestness in effort to improve the condition of their fellow-creatures, or by the course of study and discipline through which they prepare themselves for the work.

CHAPTER X.

PROGRESSIVE IMPROVEMENT INEVITABLE.

To some it will appear that enough, or more than enough, has been said to show that an improved state of being for our race may be looked for with confidence. To others the bare thought of prognosticating such an improved state with confidence will appear unwarrantable, if not presumptuous; and our last words will be directed exclusively to them.

We have confessed our inability to prognosticate what the future is to be in many respects. This confession does not preclude us from prognosticating with the utmost confidence of other portions of the future, or from describing many of the characteristics of some of the future which is partly unknown to us. We could not, for example, prognosticate concerning the future numbers of the

human race, their distribution over the various regions of the globe, the forms of government to be established, and the languages to be spoken; but we can affirm that an improved state of existence is in store for them, let their numbers, forms of government, distribution, and languages, be what they will.

We are anxious, above all things, that our expositions and reasonings, and the conclusions to which they have brought us, should not be misunderstood. As well to invite objections from those who differ, as to furnish a rallying point to those who concur with us, we wind up with the affirmation that progressive improvement is inevitable. It is scarcely necessary to repeat that we mean inevitable, subject to the condition that, in the long chains of causation leading to the future, there be no links undiscernible by man. The prognostications most universally received, and most confidently relied upon, are subject to that condition. Unless links discernible by man have been overlooked by us, we maintain that our prognostications cannot be contradicted by man, even should they be destined to be disturbed by causes still to be brought to light. If any links have

been overlooked, they who point them out will be entitled to our gratitude.

Our train of thought seems to have led us rather to check and control, than to expand and encourage the tendency to vaticination; although it has brought us to place greater confidence in vaticinations, where the vaticinator limits himself to projecting on the future, realizing to himself, and setting forth and describing to others, the continuation of that current or flow of causation which he has succeeded in tracing in the past and present.

The range of prognostication may seem to be limited, by confining it to what can be shown to have a warrant in the past and present; but confidence in prognostication thus limited will not be misplaced. There can be but one ground for suspecting the accuracy of such prognostications—the possible misinterpretation of the past and present.

The states of mind concerning the future, which have hitherto prevailed, form a strange medley of contradictions. Some things which are not, and never have been even foreshadowed in the past and present, are looked forward to with the most

unbounded confidence; and others, which seem to be quite in the order of succession from the past and present, are thought to be entirely beyond the reach of prognostication.

The more we strive to arrange our thoughts concerning the future, and to explain them to others, the more convinced we shall be how much of our difficulty is mixed up with the words which we find ready prepared for our use, and to which we are tied down.

They who object most strongly to the confident tone in which some things future are talked of, themselves talk with quite as much confidence of other things future. We should not be alive at this time if our ancestors had not relied with confidence upon some future, and we should soon cease to live if we did not feel confident of some future. Whatever form of words may be adopted, the matters to be settled are, which future things are sure to happen, irrespective of human effort; which will occur according as men work to bring them about; how human effort must be directed in order to bring about one set of things and to stave off another; what it is that has led men to act in such different

ways, while their desire to provide for their own well-being may be pronounced to have been always the same; and what is likely to be their future course of action.

Experience has shown that, upon all these things, men have arrived at their present state of knowledge through numerous mistakes. They have felt convinced that many things would happen which have not happened, and which they now see never could happen, and that many things would not and could not happen which have happened. And many things have happened because men did not know how to prevent them, the like of which have ceased to happen because men have learned how to prevent them.

The great variety of words by which we express our convictions concerning things future deserves to be noticed. We not only have "certain" and "uncertain," but "probable" and "improbable," "possible" and "impossible," "conditional" and "unconditional." Among the conditional are those things which we call effects, they being sure to follow certain other things, which for that reason we call their causes. It being once known to us that

causes are, or will be, at work, it is also known to us that their effects must follow.

Some causes produce the effects in which we are interested at once; others only after a long interval of time. Few causes act except concurrently with other causes, or are not liable to be disturbed or counteracted in their action by other causes. And great nicety of observation and power of discrimination are needful to enable us to trace out, in the vast and incessant current of events which make up human existence, those antecedents and consequents which stand related to one another, as cause and effect.

But the connection of cause and effect once established, knowledge of the future is implied as confidently as knowledge of the past and present. A prognosticator is bound to show that his prognostications are derived from his acquaintance with the past and present. Knowledge of the future, is no more than the projection upon the future of effects of causes, remote and proximate, concurrent and antagonistic, continuous and intermittent. The prognosticator is only distinguishable from the soothsayer, so long as he keeps within the bounds of his knowledge of cause

and effect; and they who dispute the accuracy or certainty of his prognostications are only distinguishable from idle babblers, so long as they can show that he has disregarded or misinterpreted the past and present, or has inferred what is not strictly deducible from them.

In order to challenge inquiry, to invite the production of evidence and arguments and of the inferences deducible from them in opposition to our own, we advisedly place on record the conclusion at which we have arrived in a form the most likely to attract opposition and dissent, if there be an opening for either. A more hesitating form of expression might lead to a partial suppression of objections, and to less vigorous investigation than is desirable for a clear understanding and subsequent enunciation of the truth, the whole truth and nothing but the truth. Our affirmation, then, is that:—

Progressive improvement is inevitable.

We mean by "inevitable" something that must happen. It would be a word without meaning, if it had no reference to the future. The common use of the word is evidence sufficient to establish that

people consider some things, even if they be mistaken, to be inevitable. But that people are not mistaken in considering some things to be inevitable is confirmed by every day's experience. Taking our examples of the inevitable from causes set in motion by man, the manipulations of the baker, the contrivances of the chronometer-maker and engineer, and the investigations of the magistrate and judge, all proceed upon the conviction of an inevitable future. The loaf of bread, the correct time, the unfailing engine, and a prisoner's innocence or guilt are inevitable from what had preceded. The only thing that remains to be settled is not whether there be an inevitable, but what ought and what ought not to be accepted as inevitable. And this can only be determined by intelligent and careful study of the past and present.

By "progressive improvement," we mean a steadily increasing preponderance (subject, may be, to occasional and temporary interruptions) of pleasurable over painful sensations in the lot of man, the more regular satisfaction of his physical wants and consequent absence of apprehension and anxiety concerning the sufficiency of future supplies, greater

immunity from superstitious fears, and a growing disposition to derive enjoyment from intellectual and moral sources, which, besides the direct enjoyment, also provide an indirect but effective defence against excess in sensual indulgence.

Thus understood, we maintain that progressive improvement is inevitable, and we refer to the expositions and arguments already given in justification of this uncompromising assertion. As if to put our expositions and arguments to an additional test, the opportunity has just been presented to us of examining a counter-representation of the future which we must either show to be incorrect, or admit the necessity of a considerable modification of our own, if not of its abandonment.

A writer of some pretensions, in combating what he considers "wild dreams" under the name of "the elevation of the masses," says:—

"The elevation of the masses means very much what 'progress' does, and how far is progress possible? It sounds very fine to picture an imaginary state of things, in which every human being is wise, learned, elegant, comfortable, and spiritually-minded.

But this is a dream quite outside of waking realities. There will, so far as we can see, always be in all countries, poor, ignorant, coarse people. Occupations must go on which we cannot conceive a superior creature filling. As long as pork is eaten, pigs must be killed; and as long as pigs are killed, there must be pork-butchers. Now, there is just as much apparent chance of the sky turning permanently a bright chocolate colour, as of a pork-butcher being ordinarily a wise, learned, elegant, holy man. We feel that to the end of time there will always be ground for a charitable hope that an allowance will be made for the shortcomings of pork-butchers. If the human race lasted till the largest granite boulder ever discoverable had been wasted away into dust by the action of the elements, there is no reasonable hope that the ordinary pork-butcher would be even on the level of our present Mr. Whalley, and so we must not expect the elevation of the masses to mean anything very glorious, and rosy, and celestial. Daily labour, or something equivalent to it, will probably continue until England ceases to be tenanted by Anglo-Saxons, who even now, according to the

best critics, have never existed. And if men are to spend all the best hours of every day in the absorbing pursuit of the necessaries of life, too much must not be expected of them. There is only a certain point which they can possibly reach. Strong manual labour, such as laying drain pipes in stiff clay, followed by beer and tobacco, is not, and never can be compatible with a profound study of the differential calculus. . . Once more, then, how far can the masses be elevated? And it seems to us that the only sensible answer is to say that possibly the elevation might go so far that what is now the favourable exception among labourers may become the type. It is conceivable that the ordinary agricultural labourer of England might be, at some distant date, on a par with the favoured gardener or gamekeeper of our present system. To any one who knows English country life, this may sound a wild dream, but we cannot shake out hope from the human breast, and we will not abandon this fair vision of progress until experience shows it to be impracticable." *

* See Appendix for a reprint *in extenso* of the article in the *Saturday Review*, from which the extract in the text has been made.

As it is of the utmost importance that nobody should, by a shifting of terms, be supposed to affirm what was never intended, a caution is needful here not to confound "every human being" with the "masses" or the "human race." The latter terms leave room for exceptions. If a future state were arrived at in which prevailing wages were doubled, the number of paupers reduced from one in twenty to one in a thousand, and our criminals to one in a hundred thousand, it would still be inaccurate to affirm that "every human being" was well off, or well conducted, great as the general elevation would be. We have stated our reasons for anticipating that the masses will steadily improve in wisdom and comfort. According to our estimate of the operation of moral forces at work among mankind, when once it has been learned how the improvement of the masses may be accomplished, it will be accomplished, however long the interval which may elapse, owing to obstructions from individual perversity, prejudice, and apathy. While we can with confidence prognosticate the elevation of the masses, we have no warrant for prognosticating as much of

"every human being." Adapting our language to that of the writer just cited, we prognosticate that the masses will increase in wisdom and comfort. How far they are likely to become more learned, elegant, and spiritually-minded, we will not venture even to guess, for we might differ with the writer as to the qualifications which entitle men to take rank among the learned, the elegant, and the spiritually-minded, or how far the masses would be the better for such qualifications.

Indisposed as he would be to place trust in our prognostications, or to study the grounds on which we made them, he does not abjure prophecy himself. According to him, "there will always be in old countries, poor, ignorant, and coarse people," by which he can only mean many such people, or there would be no relevancy in his statement. We are, therefore, plainly at issue with him, since it is our conviction that, with the causes now in operation, there must be a progressive diminution of poor, ignorant, and coarse people, and quite as rapid in old countries as elsewhere.

"Occupations must go on which we cannot con-

ceive a superior creature filling." Scavengers, sanitary engineers, nurses, surgeons, gaolers, and gaol-chaplains, we suppose, cannot be superior creatures; and hence the elevation of the masses is not to be expected. We wonder whether the ranks of "superior creatures," from which all employed in dirty, unwholesome, and unattractive work are excluded, are open to those who can revel in luxury undisturbed by thoughts of the miserable prospects of crowds of neglected and ill-used children and by the wails of the destitute and suffering not far from their doors.

The pork-butcher appears to be this writer's type of the masses who cannot be elevated. He is not and cannot be in the future "a wise, learned, elegant, holy man," and as people will continue to eat pork, pork-butchers, like the poor, will ever be with us. We are quite as hopeful of future pork-butchers as we are of future proprietors of redundant incomes. There are causes quite as potent at work to diminish the ignorance and coarseness of future pork-butchers as to diminish the indifference of the rich to the want and suffering of others in the midst

of their own luxury and profusion. What qualities man should possess in order to deserve to be considered "holy and spiritually-minded," we are not informed. We presume that these epithets would scarcely be applicable to men who did not in their conduct evince some regard for the welfare of others. And is this kind of conduct and feeling less observable in men who work hard for scanty means of subsistence, than in men who live sumptuously without work? in game-preservers than in game-keepers? in the gardeners who produce fruit, than in those seemingly born to consume fruit?

It might by some be thought derogatory to a Church of England divine to mention him in company with a pork-butcher, but our experience supplies no justification for despairing of the improvement of the second, which does not apply to the first. Were it not clear that the future of both will be the effect of causes which have been and still are increasing in potency for good, we might prognosticate a future for both similar to the past and present.

At the beginning of this century, Church pro-

perty — property specially intended for religious and moral improvement—was parcelled out among divines with very little reference to the services likely to be performed by them. Many benefices meant to be retainers for the services of as many able and pious men, were accumulated in the hands of a single individual who doled out small stipends to others to do his work. Bishops diverted to their own temporal welfare what was meant to be used in promoting the eternal welfare of others. A vaticinator so little hopeful of the piety of future pork-butchers would, in those days, have been entirely without hope of the piety of future bishops and divines. But he would have been mistaken, because he would have overlooked the intensified causes silently working for the improvement of future bishops and divines, and he would not have prognosticated what we now behold:—

Archbishops and bishops doing more work than their predecessors on incomes which many of them doubtless think much too large, although greatly reduced from those bestowed upon their predecessors; divines contented with one benefice, who although

they might shift from one benefice in which the souls to be saved are many and the stipend small, to another in which the souls are few and the stipend larger, would be ashamed to hold the stipends of more than one and perform no duty.

An event has just occurred which, if correctly reported, brings into remarkable contrast the past and the present. It may serve to illustrate, if not to establish the reasonableness of expecting a future greatly in advance of the present.

A living of 5,000*l.* a year lately became vacant by the death of a clergyman, who had held it for more than thirty years. His predecessor surrendered it, because he was elected to a bishopric, which he could not hold with his rectory. But the clergyman inducted to the rectory worth 5,000*l.* a year, had other qualifications besides those which peculiarly fit their possessors for the cure of souls—he was a prebend. He vacated his stall, worth 3,500*l.* a year, which the bishop (he being able to hold it with his bishopric) accepted in the place of the rectory, which he could not hold together with his bishopric.

It is possible that the bishop next in rotation will be simply a bishop, and not a bishop and prebend united, or rather with episcopal and prebendal emoluments culminating on one divine. But as to future rectors of the golden rectory (for it was known by that name), their incomes are to be one-third of 5,000*l.*, and the other two-thirds are to be appropriated to raise the incomes of some of the poorer livings.

With improvements like these going on, is there ground for speaking of future pious and holy pork-butchers as impossibilities? Are pork-butchers, faithfully performing the duty of pig-killing, much further removed from piety and holiness than shepherds, who neglect their flocks and squander the funds meant to secure the services of faithful shepherds?

A tone of superiority is often to be observed in persons who hold any great improvements in the human race to be all but impossible, towards those who think differently. According to them, to anticipate a future similar to the past and present, is a sign of good sense and circumspection; whereas

none but visionaries and utopians can anticipate a future much in advance of the past and present. But people, whose prognostications set experience at defiance, alone deserve these epithets. And, if we are not quite mistaken, they who prognosticate a future similar to the past and present, set experience at defiance more than they who prognosticate a future different from the past and present. The causes at work in man to produce his future are vastly more potent for good than those which produced his past and present. While, therefore, prognosticators of a future in advance of the past and present *may* be misinterpreting experience, prognosticators of a future similar to the past and present *must* be doing so.

The surest sign of want of good sense and circumspection, in dealing with the future, is to prognosticate that it will be a mere repetition of the past and present. There may be different opinions among thoughtful men, as to the extent of the change, and for the better, to be expected in the future. But all will agree that there must be some change for the better. Confidence in prognostications will be

greatly strengthened, if they who make them will keep carefully within the bounds of what experience warrants. Human effort, also, will be made much more efficient in promoting improvement, when clear conceptions are formed of what experience forbids as impossible, or sanctions as possible and probable.

The most gifted of statesmen, while preparing his measures for the public advancement, and with the utmost confidence in the results that they must lead to, will acknowledge to himself the limits within which alone he can influence the future; and will thus neither mislead others nor prepare disappointment for himself.

The most gifted of educators, confident that he is employing the means at his disposal for developing the children trusted to his care into well-disposed and capable men, will also be prepared to expect that, owing to some unperceived incapacity in himself, or to causes beyond his control, whether accident, disease, or defective organization, some few will be prevented from attaining to a share in that improved destiny which awaits all but a few.

The most gifted of navigators, aided by all those appliances which have progressively increased the safety, speed, and comfort of voyages across the ocean, is confident in his capacity to reduce the dangers and uncertainties of navigation to a *minimum* as calculable by experience. His plans are so laid as to keep him clear from shipwreck, without deluding him into the belief that shipwreck is impossible.

In like manner, we may all, for ourselves and others, keep perfectibility in view as the ideal to be aimed at, confident that, in struggling towards it, we shall be ever approaching, although not destined to reach it.

We have been endeavouring all along to keep on our guard against the fascinations of the "rosy" and "celestial," and to stick to the correct and the probable, in our estimate of the future—and more particularly the future of the human race. That future, as is well known, wears a very different appearance to different minds and temperaments. But, however numerous and inconsistent with one another these appearances may be, they are susceptible of classification under three heads; since any future

must either be a repetition of the past and present, or be something worse or better than the past and present.

That it cannot be a mere repetition of the past and present is obvious, since, as we have seen, there are causes now at work which never were at work before, and they must produce effects of which we never had the like before. The effects prepared for us, unlike previous effects, and themselves to be the causes of future effects, may be worse or better than previous effects; and we ought not even to attempt to form an opinion upon the probable merits of the future in store for us until we are quite agreed upon what we mean by the terms "worse" and "better" as applied to the future.

If there be anybody prepared to contend that no one condition of existence is worse or better than another—that happiness prevails quite as much among the Australian aborigines, Kaffirs, and Abyssinians as among ourselves, or in our poverty-stricken districts as in our airy squares and parks with their adjacent mansions, of course the question is closed between him and ourselves. But the writer whom we have

cited is evidently not of this way of thinking, and we invite him, and all who agree with him that one state of existence may be better than another, to consider with us the characteristics by which they are chiefly distinguishable. The happier state of existence, as it appears to us, may in general terms be said to be that which admits of the keener enjoyment of life, and is freer from all those disturbances arising out of ill-health, wounded affections and disappointed hopes. The concomitants of such a state of existence are abundance of wealth, knowledge how to use it, habits in harmony with this knowledge, and a relish for intellectual and social pleasures, with opportunities for enjoying them. To these we might add, if we could make quite sure of their meaning, "holiness" and "spiritual mindedness," and if certified that the first did not countenance the sacrifice of human well-being to propitiate some imaginary deity, and the second did not imply such an absorption in thoughts concerning the super-human, as to leave neither time nor inclination for efforts to promote the improvement of the human race.

Intelligence and good habits are quite as indis-

pensable for this better state of existence as air and food are for life; and happily, we have at last arrived at the conviction that intelligence and good habits are effects of education. Wherever education, conceived in the right spirit, and skilfully administered, is present; knowledge and good habits, and their consequent, the better state of existence, will follow. Wherever education is withheld, knowledge and good habits as its consequents are withheld also. Our forecasting of the bright future of the human race as contrasted with that of the gloomy future said to be in reserve for the unholy and unspiritual masses, is founded upon our conception of the potency for good in education, and upon our knowledge that this conception is shared by others. There is one result which must eventually follow from this state of feeling combined with parental solicitude, and that result is progressive improvement.

With the exceedingly ill-digested and incoherent notions afloat under the name of education, no surprise or discouragement ought to be felt because so many are blind to the consequences sure to follow from education properly understood. While so large

a portion of our young is debarred from education, one avoids as much as possible disparaging comments upon its character, in order not to appear to sanction so flagrant a neglect of duty. Nevertheless, in self-justification, they who underrate the influence for good of education, must be cautioned that education-proper is not to be confounded with the miserable pretence too frequently passed off under its name. Neither should the failure of the best of educations to produce the desired effect upon every individual disappoint those who trust in it. Experience has made known to us many causes capable of counteracting in individuals the effects generally looked for from education. And prognostication based upon experience confines itself within the limits of experience. It sets forth the progressive improvement of the masses and not of every individual educated. Representations of failure as applied to education, even granting the education not to be in fault, are irrelevant, since our prognostications acknowledge individual failure, while they speak confidently of general success. The progressive improvement of the masses is quite compatible with the continuance

of individuals unsusceptible of improvement, excepting so much as may be reflected upon them from the improvement of others.

The operations of man from generation to generation have been capable of producing a progressively improving state of existence, chequered by apparent temporary and local falling back and suspensions of progress. And his capabilities are now greater than ever.

Our concluding words shall be addressed to those who stand at the two extremes of the opinions concerning the future which we have been combating—to those who maintain (if only in words) that the future is entirely hidden from man, and to those who lay claim to a knowledge of the future beyond what is to be gathered from the past and present.

We hope we have done something towards assisting the first to break loose from the bondage in which they have been held by their own words, and to desist from repeating what their daily and hourly acts contradict. Let them reflect that if they acted as if there were to be no future, they would soon cease to live; and that if they had acted

in the past regardless of any future, they would not be alive unless they had been protected from the consequence of their own ignorance by the foreknowledge and forethought of others. We also hope we have done something towards persuading the latter to confine themselves, in their attempt to forecast the future, more and more to the study of the past and present;" particularly to the task of extricating from among all antecedents and consequents, those which constitute parts of the great chain of causation. Their ambition may seem to be somewhat checked in the beginning; but very little progress in their studies will convince them that a far wider scope, contracted as they may have thought it, is afforded than they are likely to use to their own satisfaction, still less to exhaust. In compensation for their apparent self-denial, they will find, progressively as their future becomes present and past, that it will bring with it less disappointment to them. Another reward awaits students who seek their knowledge of the future exclusively through observation and experiment. They will arrive at a clearer appreciation of that part of the future which can be influenced by man, and

be encouraged thereby to fit themselves to take rank among the causes at work to produce the better future which we prognosticate for the human race; and, at all events, not to be among the causes which retard the elevation of the masses, and obstruct that better future sure to come without, if not with, their assistance; after an interval, longer or shorter according to the number of human beings co-operating to impart to others the benefit of the advantages—foretaste of the better future in store for all—which a few only are now privileged to enjoy.

APPENDIX.

THE ELEVATION OF THE MASSES.

(*Reprinted from the "Saturday Review" of June* 3, 1865.)

Mr. Gladstone has been down to Chester to help his son, and has told his son's possible constituents that he has instructed him to pronounce himself decidedly on the Liberal side. And he has explained what he means by the Liberal as opposed to the Conservative side. The Liberal, he says, is the man who trusts the people as far as he thinks prudent, and the Conservative is the man who mistrusts the people as much as he dare. If this is so, we do not hesitate to say that we, like Mr. Gladstone, junior, are Liberals. It sounds much better, and is much better, to trust the people as far as is prudent, than to mistrust the people as far as is safe. But when we have trusted the people, what is to come next? What can we do for them, or what can they do for themselves? Mr. Gladstone

pointed, in his vague flowery way, to a real difference, not so much of opinion, as of feeling. In the discussion of political matters there is no great difference between Liberals and Conservatives. But there is a great difference in the mode in which they respectively approach political discussion. A Conservative wishes to conserve the existing scheme of English society, and to improve, by carrying further, what exists of good in it. A Liberal does not look so much to the conservation of what exists as to the elevation of the masses. It is very desirable, therefore, that persons of all parties in England should set themselves to consider in what sense, if any, the masses can be elevated, and how far this elevation can be produced by the direct conscious intervention of sympathizing friends. The elevation of the masses means very much what "progress" does, and how far is progress possible? It sounds very fine to picture an imaginary state of things in which every human being is wise, learned, elegant, comfortable, and spiritually-minded. But this is a dream quite outside of waking realities. There will, so far as we can see, always be in old countries poor, ignorant, coarse people. Occupations must go on which we cannot conceive a superior creature filling. As long as pork is eaten, pigs must be killed; and as long as pigs are killed, there must be pork-butchers. Now there is just as much apparent chance of the sky turning permanently a bright chocolate colour as of a pork-butcher being ordinarily a wise, learned,

elegant, holy man. We feel that to the end of time there will always be ground for a charitable hope that an allowance will be made for the shortcomings of pork-butchers. If the human race lasted till the largest granite boulder ever discoverable had been wasted away into dust by the action of the elements, there is no reasonable hope that the ordinary pork-butcher would be even on the level of our present Mr. Whalley, and so we must not expect the elevation of the masses to mean anything very glorious and rosy and celestial. Daily labour, or something equivalent to it, will probably continue until England ceases to be tenanted by Anglo-Saxons, who even now, according to the best critics, have never existed. And if men are to spend all the best hours of every day in the absorbing pursuit of the necessaries of life, too much must not be expected of them. There is only a certain point which they can possibly reach. Strong manual labour, such as laying drain-pipes in stiff clay, followed by beer and tobacco, is not and never can be compatible with a profound study of the differential calculus. Once more, then, how far can the masses be elevated? and it seems to us that the only sensible answer is to say that possibly the elevation might go so far that what is now the favourable exception among labourers might become the type. It is conceivable that the ordinary agricultural labourer of England might be, at some distant date, on a par with the favoured gardener or gamekeeper of our present system. To any one who knows

English country life this may sound a wild dream, but we cannot shake out hope from the human breast, and we will not abandon this fair vision of progress until experience shows it to be impracticable.

This is, however, not expecting anything so wild and beautiful that good sense recoils from it at once. There is nothing very exaggerated in supposing that, in some brighter and more blissful century, the ordinary English labourer may be like what the gardener with a pound a week is now —tolerably sober, self-respecting, church-going, with a pride in his family and himself, and an independence of look and bearing which bespeaks a consciousness that he is well worth his wages. How is this consummation, so very far off from anything we see now, to be attained or approached? What are practically the means of elevating the masses? These means may be reduced, we think, under three heads. We may, in the first place, change the economical position of the poor, and of all means of elevating them this is the most certain and effectual. If things can but be so arranged that the poor man gets more wages than he did before, that taxation falls more lightly on him while it yet falls fairly on all, and that he can direct his energies from one channel of production into another with facility, we have given him a great chance of rising, and making himself and those belonging to him better and happier. The repeal of the Corn Laws, the encouragement of emigration, the readjustment of taxation, have all been

powerful agencies by which an approach to this end has been made in our time. Sometimes the means which experience proves to have been most conducive to the end have been adopted consciously, and sometimes they have been adopted unconsciously. Sir Robert Peel, when he abandoned his party to cheapen the poor man's bread, distinctively put before himself what he was gaining and what he was losing. He gave up a most comfortable political position, and much present ease and honour, in order that poor men might bless him and posterity might honour him. Had he wished, he might have stood so high that he would have been the angel on whose side Mr. Disraeli would have wished to have been. But he forewent this brilliant position, and preferred to try to elevate the masses. Mr. Gladstone, of all living statesmen, has done the most to follow in his steps, and to devise and carry measures calculated to raise the poor man, and therefore, in spite of his undeniable unpopularity in the House, he has a strong hold on the country, and has a mastery over the Liberal party, which may pass away from him, but which is at present unrivalled. Not that this is saying much, for his next conspicuous rival is Sir George Grey; but still the cause as well as the quantity of his political celebrity deserves to be considered. And yet the greatest economical changes in favour of the poor are perhaps those that are produced by persons who do good in an unconscious and indirect way. No one change has done so much for

the English poor as the construction of railways. That he has the power of getting away from where he is, makes the poor man in every way more independent; and the self-reliance of the poor, although exceedingly disagreeable to see practically, especially among the women, and more particularly the young women of the poor, is yet one of the most precious qualities they can possess, for without it they could never pass to the great gardener ideal which, if all is well, lies before them.

In the second place, direct help of a social, moral, intellectual, and religious kind may be given to the poor. Those who are better off, more instructed, and wiser than they are, may do something for them. It is often assumed that this is the only mode of helping the poor, and we venture to think considerable harm has flowed from this assumption; but, at any rate, this mode of helping them is indispensable. If the rich ceased to care for the poor, society would instantly retrograde. Churches must be built, hospitals maintained, schools opened and supervised. Villages do not grow better by persons having theories about them, but by persons working in them. There are a thousand channels in which a zealous intelligent man who wishes to benefit the poor of a parish can benefit them, if he has time and discretion, and a recognized position. And it is in this respect that the Established Church of England shines by the side of all other religious communities. There are many anomalies in the theory of

the Establishment, but it does do immense practical good in parishes; and it does it by not having too spiritual a view of human life. It provides men who are willing and very fairly competent to take the lead in the dry, uninviting details of parochial life, the phases of which are very miscellaneous, and by no means wholly of a spiritual kind. We cannot at present conceive any way in which the beneficial operation of the harmless country clergyman could be replaced, if the position of the Church were changed. It might be possible to get the same amount, or even a greater amount, of spiritual instruction, but it would scarcely be possible to get the same amount of honourable, disinterested, parochial leadership. But although direct help must be given to the poor if they are to be elevated, yet the mode in which the help is given will necessarily depend on the theory of the proper position of the poor which is generally held, and the ordinary views of Englishmen on this head might perhaps be changed with advantage. There is reason to think they will be changed, when the third set of influences affecting the poor come into more active operation than at present.

By this third set of influences, we mean all those which are dependent on direct political changes made with the express object of elevating the poor. The Liberals in general think that there are such political changes possible, while the Conservatives assert that the object to be attained is of doubtful value in itself, and certainly not worth the risk

which must be run before it can be attained. This constitutes a real deep division of parties, and promises to do so for some years to come. This Session the battle has been fought on the Union Chargeability Bill. There has been much bitter feeling about this, and the motives and views of the landowners have been perhaps too harshly criticized. It is much fairer and better to look at acknowledged facts as part of a system, and as illustrations of a general theory, than as affording a basis of denunciation against particular landlords. Sir Baldwin Leighton, for example, stated that on his estate a workman had to come eight miles to work, and that he as landlord would not let this man have a cottage near his work because he did not bear a character that Sir Baldwin quite approved. This was given as an illustration of the good motives on which landlords really act when they seem to ignorant outsiders to be harsh and cruel. The man was good enough to be employed and paid, but he was just so far imperfect that Sir Baldwin thought it proper to make him walk eight unnecessary miles a day. And if a landlord is a wise being, appointed by Providence to guide, punish, and regulate the poor, Sir Baldwin was quite right. But this opens a wide question. It may be urged that a political system which gives one man the power of saying to another, that although he is not punishable by the law, although he commits no assignable offence, although he comes to work regularly and earns his wages, he is to be ordered by an inexor-

ably just being to walk two thousand unnecessary miles every year, is a very bad system. The power of the owner of the soil to punish what he (perhaps reasonably) considers faults, will seem to many minds perfectly preposterous, and they will think that the political distribution of land in England must have very enormous advantages, to counterbalance so glaring an evil. The franchise, again, ought undoubtedly to be made a mode of elevating the poor. Perhaps those who wish it to be altered will not allow it to be so altered as to elevate the poor in any striking and obvious way. Tossing votes to the mob as coppers are tossed to boys cannot do them much good. But an extension of the franchise, so contrived as to be an encouragement to saving and industry, would tend indisputably to elevate the poor, provided that the best and most enterprising of the poor were kept up to thinking that a vote is a privilege and an honour. It is not our business to devise schemes of this kind in detail; but it is hard to understand how any one can deny that some scheme of the sort might contribute to the elevation of the poor, unless he sets out with the theory that it is not the elevation of the poor, but the conservation of the existing order of English society, that is the great end to be kept in view.

THE END.

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